



Chapter 1

Introduction & Representation

Extra Practice Packet For The Chapter 1 Test

*Math Notes: Perimeter & Area

*Math Notes: Rounding

*Math Notes: Conjecture & Justify
When

*Math Notes: Comparisons

*Math Notes: Natural, Whole, & Prime Numbers

*Describing & Extending Patterns

*Histograms & Bar Graphs

*Histogram Practice Pages (6 Pgs.)

*Types Of Numbers

*Area & Perimeter Practice Sheet

*Area & Perimeter (Finding Side Length
Perimeter Is Given)

*Area & Perimeter (Finding Side Length
When Area Is Given)

*Place Value Practice Sheet

*Comparing Decimals Practice Sheet

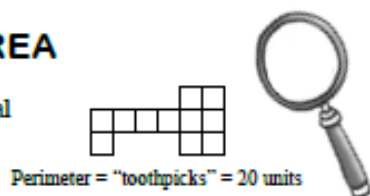
*Rounding Decimals Practice Sheet

NOTES:

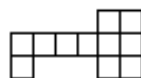
MATH NOTES

PERIMETER AND AREA

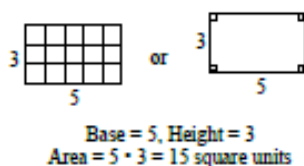
The **perimeter** of a shape is the total length of the boundary (around the shape) that encloses the interior (inside) region on a flat surface. In the game "Toothpicks and Tiles," the number of tile side lengths (toothpicks) is the same as the perimeter of the shape. See the examples at right.



The **area** of a shape is a measure of the number of square units needed to cover a region on a flat surface. In the game, the area is equal to the number of "tiles" in the shape.



A **rectangle** is a quadrilateral (four sides) with four right angles. The opposite sides are equal in length. Two sides that come together (meet) at a right angle are referred to as the length and width, or base and height. The area (A) of any rectangle is found by the relationship $A = \text{length} \cdot \text{width}$.



PLACE VALUE

The number assigned to each place that a digit occupies is called the **place value**. In our number system, the place values are all powers of ten.

Starting from the left side of the decimal point, the place values are: ones, tens, hundreds, thousands, ten thousands, and so on.

On the right side, the place values are **tenths**, **hundredths**, **thousandths**, and so on.

In the example at right, the place occupied by 8 has the value of 100, so the value of the digit 8 is 800.



The number above is read, "nine thousand, eight hundred seventy-six and five hundred forty-three-thousandths."

The number 64.3 is read, "sixty-four and three-tenths."

The number 7.17 is read, "seven and seventeen-hundredths."

The only time the word "and" is said when reading a number is at the location of the decimal point.

ROUNDING

Sometimes you want an approximation of a number. One way to do this is to round the number. For example, 4,738 is 5,000 when rounded to thousands. The number 5,000 is said to be rounded "to the nearest thousand."



To round a number:

1. Find the place to which the number will be rounded.
2. Examine the digit one place to the right.
3. If the digit is 5 or greater, add 1 to the place you are rounding. If the digit is less than 5, keep the digit in the place you are rounding the same.

In the example 4,738, the number 4 is in the thousands place. If you check the hundreds place, you see that 7 is greater than 5. This means the 4 needs to be increased by 1. Here are some other examples:

Round 431.6271 to the nearest tenth.

- (1) Focus on the 6 in the tenths place.
- (2) The number to the right (in the hundredths place) is 2. This is less than 5.
- (3) 431.6 is the answer.

Round 17,389 to the nearest hundred.

- (1) Focus on the 3 in the hundreds place.
- (2) The number to the right (in the tens place) is 8. This is more than 5.
- (3) 17,400 is the answer.

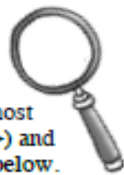
CONJECTURE AND JUSTIFY



A **conjecture** is a statement that appears to be true. It is an educated guess.

To **justify** a conjecture is to give reasons why your conjecture makes sense. In this course you will justify conjectures by using observations of a pattern, an algebraic validation, or some other logical method.

COMPARISONS



Mathematical symbols are used to compare quantities. The most commonly used symbols are the two inequality signs ($<$ and $>$) and the equal sign ($=$). You can see how these symbols are used below.

greater than: $>$	$7 > 5$
less than: $<$	$3 < 5$
equal to: $=$	$1 + 2 = 3$
greater than or equal to: \geq	$4 \geq 4$
less than or equal to: \leq	$8 \leq 9$

NOTES:

NOTES:

NATURAL, WHOLE, AND PRIME NUMBERS



The numbers $\{1, 2, 3, 4, 5, 6, \dots\}$ are called **natural numbers** or **counting numbers**. A natural number is **even** if it is divisible by two with no remainder. Otherwise the natural number is **odd**. The **whole numbers** include the natural numbers and zero.

If one natural number divides another without remainder, the first one is called a **factor** of the second. For example, the factors of 12 are 1, 2, 3, 4, 6, and 12. If a number has exactly two factors (1 and itself), it is called a **prime number**. If a number has more than two factors it is called a **composite number**. The number 1 has only one factor, so it is neither prime nor composite.

The prime numbers less than 40 are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, and 37.

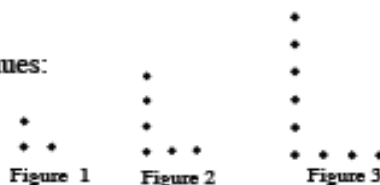
DESCRIBING AND EXTENDING PATTERNS

Students are asked to use their observations and pattern recognition skills to extend patterns and predict the number of dots that will be in a figure that is too large to draw. Later, variables will be used to describe the patterns.

Example

Examine the dot pattern at right. Assuming the pattern continues:

- Draw Figure 4.
- How many dots will be in Figure 10?



Solution:

The horizontal dots are one more than the figure number and the vertical dots are even numbers (or, twice the figure number).

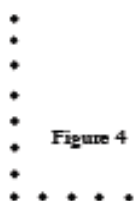


Figure 1 has 3 dots, Figure 2 has 6 dots, and Figure 3 has 9 dots. The number of dots is the figure number multiplied by three.

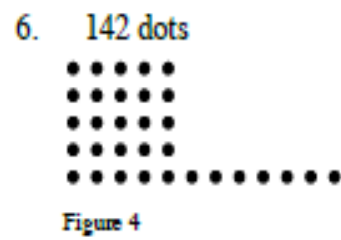
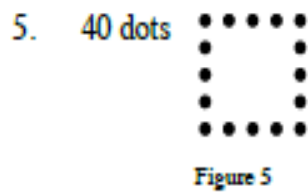
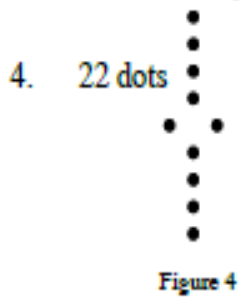
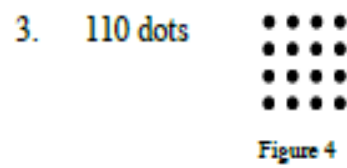
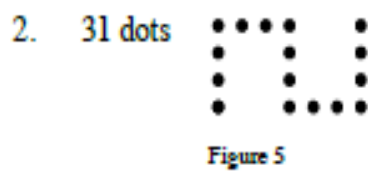
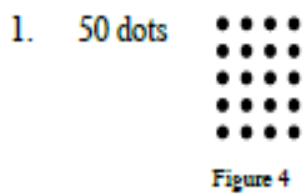
Figure 10 has 30 dots.

Problems

For each dot pattern, draw the next figure and determine the number of dots in Figure 10.

-
-
-
-
-
-

Answers



GRAPHICAL REPRESENTATIONS OF DATA

HISTOGRAMS AND BAR GRAPHS

Histograms and bar graphs are visual ways to represent data. Both consist of vertical bars (called bins) with heights that represent the number of data points (called the frequency) in each bin.

Histograms are for displaying distributions of numerical data. In a histogram each bar represents the number of data elements within a certain range of values. All the bars touch each other. Values at the left side of a bin's range are included in that bin. Each range of values should have the same width.

Bar graphs are for displaying categorical data. In a bar graph each bar represents the number of data elements in a certain category. All the bars are the same width and are separated from each other.

For additional information and examples, see the Math Notes boxes in Lessons 2.1.2 and 2.2.1 of the *Core Connections, Course 1* text, or Lesson 7.1.1 of the *Core Connections, Course 2* text. For additional examples and practice, see the *Core Connections, Course 1* Checkpoint 9A materials or *Connections, Course 2* Checkpoint 7B materials in the back of those texts.

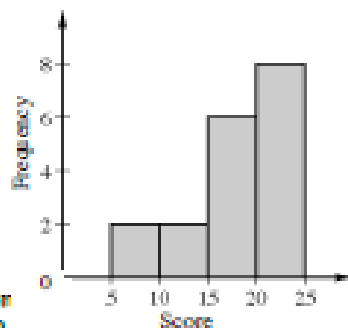
Example 3

The scores for a 25-point quiz are listed below arranged from least to greatest.

7, 7, 12, 13, 15, 16, 16, 16, 18, 19, 20, 20, 20, 21, 21, 22, 23, 24

Using intervals of five points, create a histogram for the class.

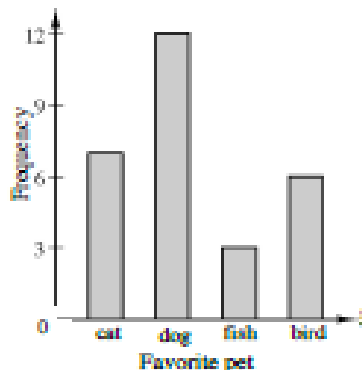
See histogram at right. Scores on the right end of the interval are included in the next interval. The interval between 10 and 15 only includes the two scores of 12 and 13. The interval between 15 and 20 only includes the six scores of 15, 16, 16, 16, 18, and 19.



Example 4

Ms. Lim asked each of her students about their favorite kind of pet. Based on their responses, she drew the bar graph at right. Use the bar graph to answer each question.

- What is the favorite pet?
- How many students chose a bird as their favorite pet?
- What was the least favorite pet?

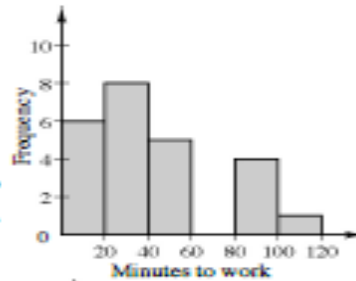


- d. If every student voted once, how many students are in the class?

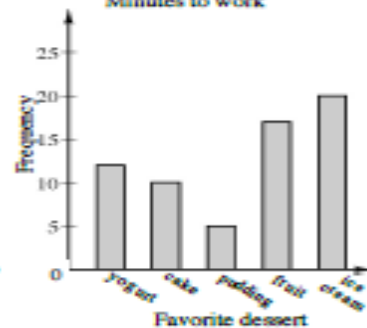
Answers: a. dog b. 6 c. fish d. 28

Problems

5. Mr. Diaz surveyed his employees about the time it takes them to get to work. The results are shown in the histogram at right.
- How many employees completed the survey?
 - How many employees get to work in less than 20 minutes?
 - How many employees get to work in less than 40 minutes?
 - How many employees take 60 minutes to get to work?



6. The two sixth grade classes at Vista Middle School voted for their favorite dessert. The results are shown in the bar graph at right for the five favorite choices.
- What was the favorite dessert and how many students made that choice?
 - How many students selected cake as their favorite dessert?
 - How many students selected yogurt as their favorite?
 - How many more students selected ice cream than pudding?



7. Mr. Fernandez asked 30 people at work how many pets they owned. The results are shown at right. Make a histogram to display this data. Use intervals of one pet.
8. During the first week of school Ms. Chan asked her students to name the country where they were born. There were so many different countries she grouped them by continent:

0 pets	5 people
1 pet	8 people
2 pets	10 people
3 pets	3 people
4 pets	2 people
5 pets	1 person
9 pets	1 person

North America: 14 students, South America: 2 students, Europe: 3 students, Asia: 10 students, Africa: 1 student, Australia: 0 students.

Make a bar graph to display this information.

9. Three coins were tossed 20 times and the number of results that were “heads” each time is shown below:
- 1, 1, 2, 0, 2, 3, 1, 2, 1, 2, 2, 1, 3, 2, 0, 1, 2, 0, 2, 1
- Make a histogram to show the results.

10. The physical education teacher at West Middle School asked the class about their favorite winter activity. Here were the results:

reading: 8 students, ice skating: 4 students, skiing: 6 student, snowboarding: 11 students, computer activities: 14 students.

Make a bar graph to show the results.

Name _____

Date _____

Do Now Math Worksheet Grade 6 Advanced Version 6

Your friend was supposed to create a histogram and data table based on the number of candy bars sold at the snack stand. You look at the table and see scattered data that he took.



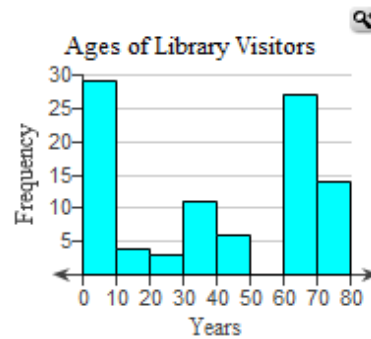
April - 211 January - 84 June- 182
September - 412 May - 93 December - 57
February - 92 July - 247 October- 178
March - 514 August - 112 November - 96

Make a histogram to help organize your friends data.

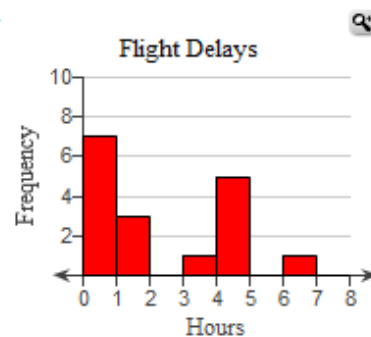
Name: _____

Histograms

This histogram groups recent visitors to a library by their ages. From which age group were there the most visitors?



The histogram shows the lengths of flight delays at several airports. How many flights were delayed?



The table shows the prices for ten different magazines. Make a histogram of the data.

1.99	5.25	3.25	4.75	5.95	3.50	2.95	3.25	4.95	3.75
------	------	------	------	------	------	------	------	------	------

Which histogram shows the data?

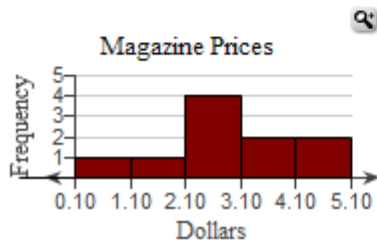
A.



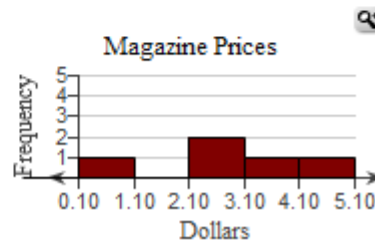
B.



C.



D.

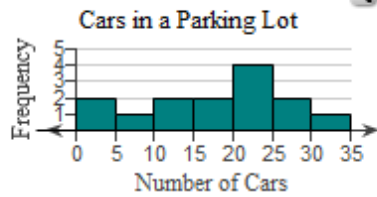


The table shows the number of cars in a parking lot at 6 P.M. each day for two weeks. Make a histogram of the data.

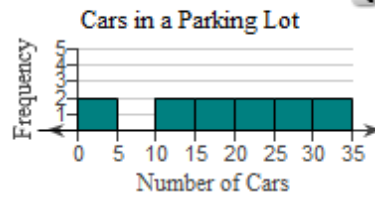
Cars in a Parking Lot						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6	39	29	27	19	8	21
28	13	31	33	16	23	26

Which histogram shows the data?

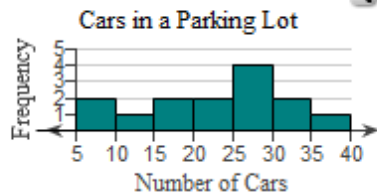
A.



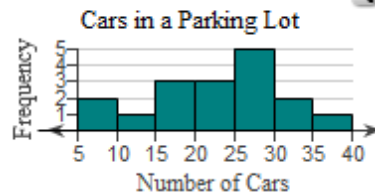
B.



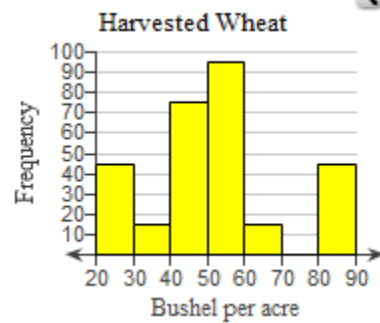
C.



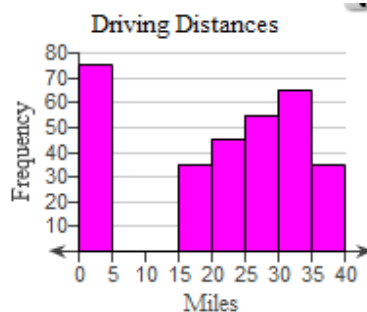
D.



A group of farmers recorded the number of bushels of wheat per acre they harvested. What do clusters of two side-by-side bars tell you?



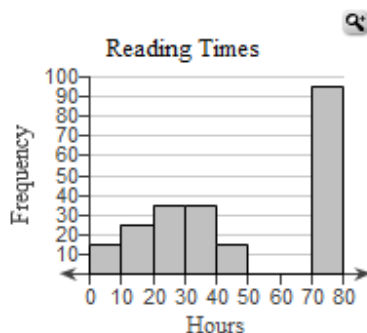
A survey asked 310 people how far they drive to work. The histogram shows the results of the survey. One bar in the histogram stands out. What might it tell you about the drives?



What does the bar that stands out tell you about the drives?

- A. The number of people that do not drive to work
- B. The number of people with a long drive to work
- C. The number of people with a moderate drive to work
- D. The number of people with a short drive to work

Writing The histogram shows how much time 220 people spend reading each month. One bar in the histogram stands out. What might it tell you about these times? Use pencil and paper. What could you say about the reading times if that particular bar were not there?



What does the bar that stands out tell you about the reading times?

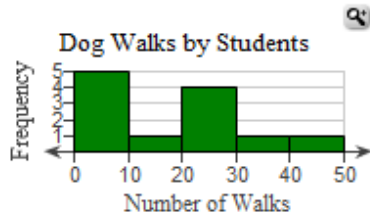
- A. The number of people that read for a moderate time
- B. The number of people that do not read
- C. The number of people that read for a short time
- D. The number of people that read for a long time

Reasoning The table shows how many times each of ten students walked a dog last month. Make a histogram of the data. Use pencil and graph paper. Think about other histograms for this data that use increasingly wider intervals. Describe how the shapes of the histograms change.

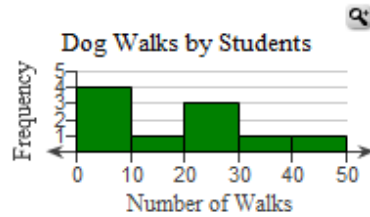
Dog Walks by Students									
1	6	42	4	32	16	24	28	23	4

Which histogram shows the data?

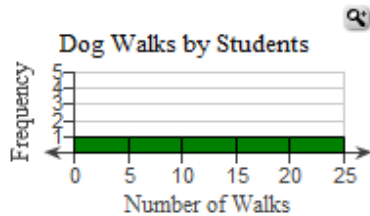
A.



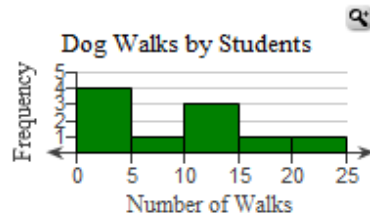
B.



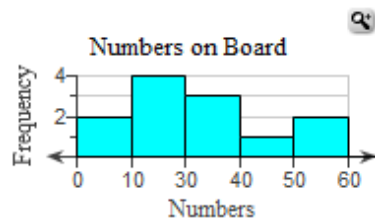
C.



D.

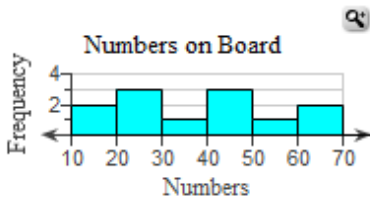


Error Analysis Priya's teacher writes the numbers 1, 7, 12, 13, 18, 29, 31, 34, 39, 49, 52, and 53 on the board. The teacher asks the class to make a histogram of the data with interval width 10. Priya makes the incorrect histogram of the data as shown. What is a correct histogram of the data? What is Priya's error?

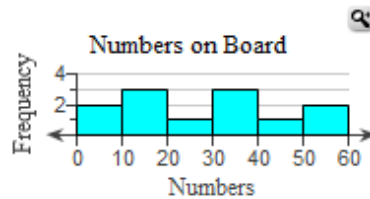


Which histogram shows the data?

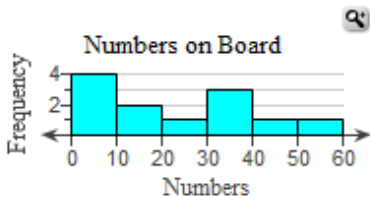
A.



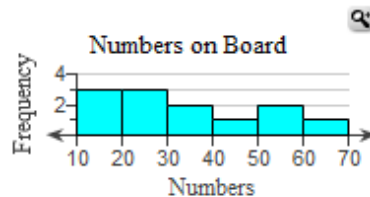
B.



C.



D.

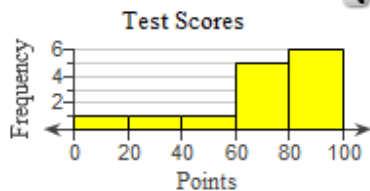


Multiple Representations The table shows the test scores for 14 students on a math test. Make a histogram of the data using an interval width of 20. Use pencil and graph paper. Make at least two more histograms of the data using different interval widths. Explain which histogram best represents the data.

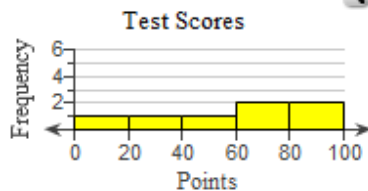
Test Scores						
91	81	88	69	18	71	63
74	79	32	59	97	89	92

Which histogram shows the data with interval width 20?

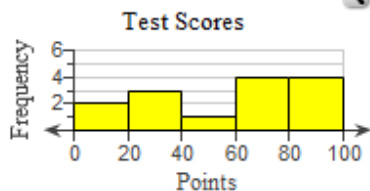
A.



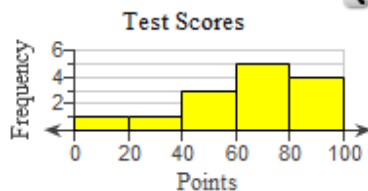
B.



C.

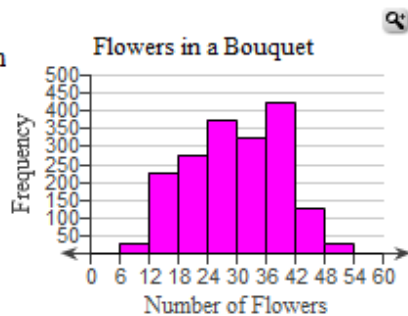


D.

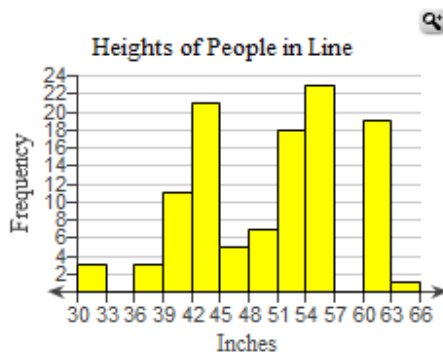


Floral Arrangements A flower shop tracks the number of flowers in each bouquet it sells. The histogram shows the number of flowers in the bouquets it sold last year.

Which bouquets were most popular? Were bouquets with 36 flowers among the most popular?



For a ride at the county fair, you must be at least 4 feet 6 inches tall. The histogram shows the heights of people who entered the line for this ride. How many people could not get on the ride?

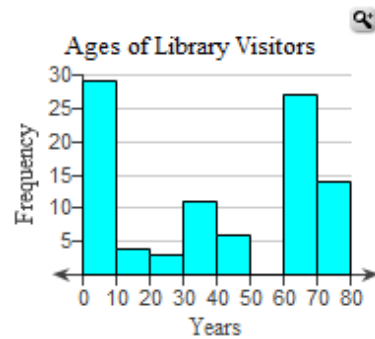


Name: _____

Histograms

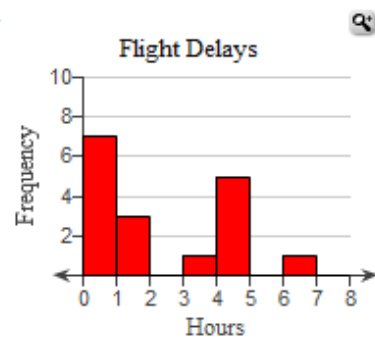
This histogram groups recent visitors to a library by their ages. From which age group were there the most visitors?

0-10



The histogram shows the lengths of flight delays at several airports. How many flights were delayed?

17

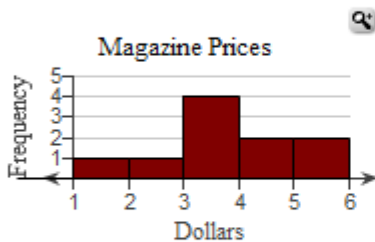


The table shows the prices for ten different magazines. Make a histogram of the data.

1.99	5.25	3.25	4.75	5.95	3.50	2.95	3.25	4.95	3.75
------	------	------	------	------	------	------	------	------	------

Which histogram shows the data?

A.

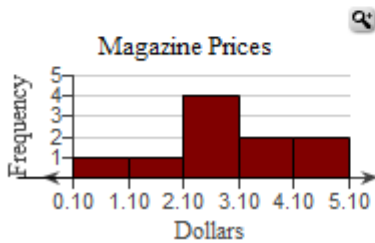


B.

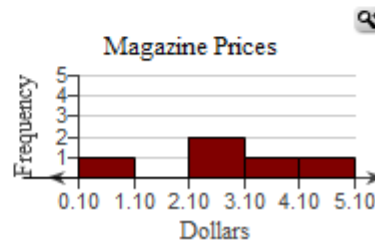


A

C.



D.

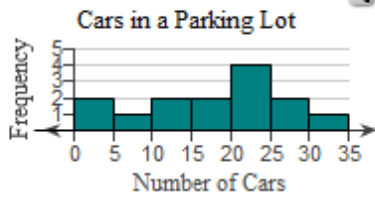


The table shows the number of cars in a parking lot at 6 P.M. each day for two weeks. Make a histogram of the data.

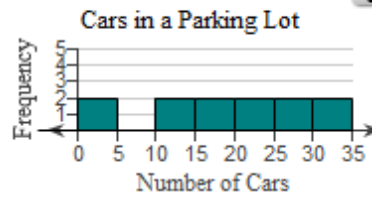
Cars in a Parking Lot						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6	39	29	27	19	8	21
28	13	31	33	16	23	26

Which histogram shows the data?

A.

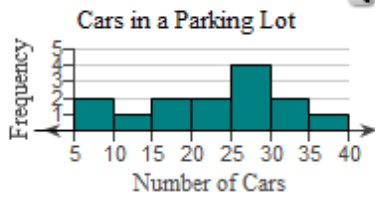


B.

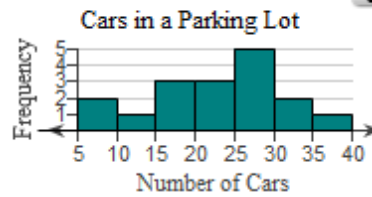


C

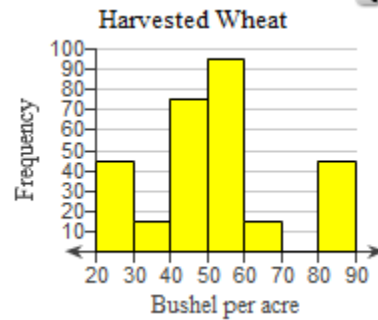
C.



D.

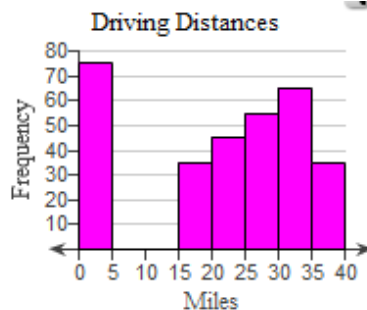


A group of farmers recorded the number of bushels of wheat per acre they harvested. What do clusters of two side-by-side bars tell you?



Two side-by-side bars tells you how many farmers harvested that range of bushels per acre. For example, the first two bars on the graph tell us that 60 farmers harvested between 20 and 40 bushels per acre.

A survey asked 310 people how far they drive to work. The histogram shows the results of the survey. One bar in the histogram stands out. What might it tell you about the drives?

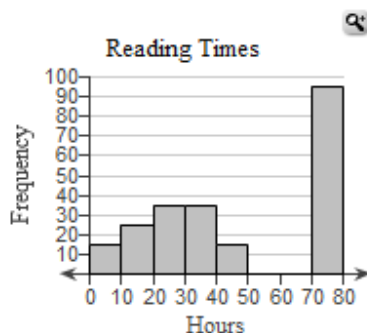


It tells you that most of the people surveyed live within 0-5 miles from their job—Choice D below.

What does the bar that stands out tell you about the drives?

- A. The number of people that do not drive to work
- B. The number of people with a long drive to work
- C. The number of people with a moderate drive to work
- D. The number of people with a short drive to work

Writing The histogram shows how much time 220 people spend reading each month. One bar in the histogram stands out. What might it tell you about these times? Use pencil and paper. What could you say about the reading times if that particular bar were not there?



The standout bar tells us that 95 people read between 70-80 hrs. per month. If that bar were not on the graph we would perhaps think that most people read less than half of what the standout bar represents.

What does the bar that stands out tell you about the reading times?

- A. The number of people that read for a moderate time
- B. The number of people that do not read
- C. The number of people that read for a short time
- D. The number of people that read for a long time

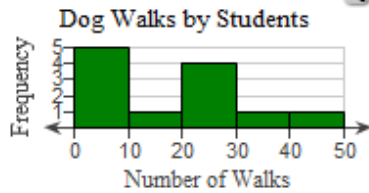
D

Reasoning The table shows how many times each of ten students walked a dog last month. Make a histogram of the data. Use pencil and graph paper. Think about other histograms for this data that use increasingly wider intervals. Describe how the shapes of the histograms change.

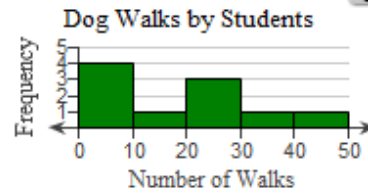
Dog Walks by Students									
1	6	42	4	32	16	24	28	23	4

Which histogram shows the data?

A.

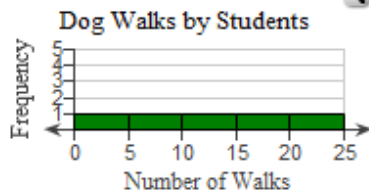


B.

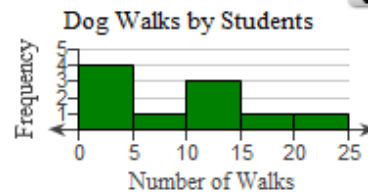


0-10

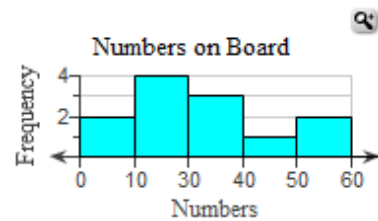
C.



D.

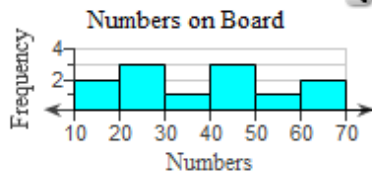


Error Analysis Priya's teacher writes the numbers 1, 7, 12, 13, 18, 29, 31, 34, 39, 49, 52, and 53 on the board. The teacher asks the class to make a histogram of the data with interval width 10. Priya makes the incorrect histogram of the data as shown. What is a correct histogram of the data? What is Priya's error?

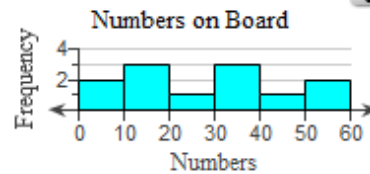


Which histogram shows the data?

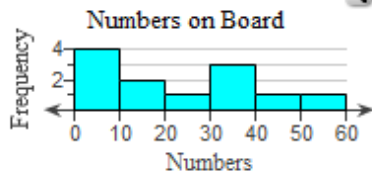
A.



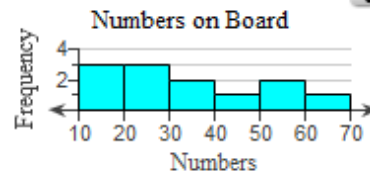
B.



C.



D.



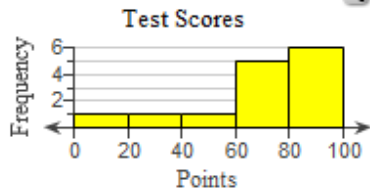
The correct histogram is B. She incorrectly grouped 10-30 all together, rather than breaking them into 2 categories as instructed. These categories would be 10-20 and 20-30.

Multiple Representations The table shows the test scores for 14 students on a math test. Make a histogram of the data using an interval width of 20. Use pencil and graph paper. Make at least two more histograms of the data using different interval widths. Explain which histogram best represents the data.

Test Scores						
91	81	88	69	18	71	63
74	79	32	59	97	89	92

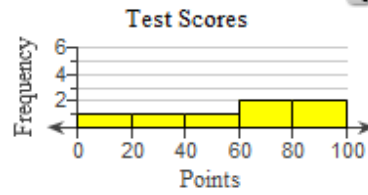
Which histogram shows the data with interval width 20?

A.

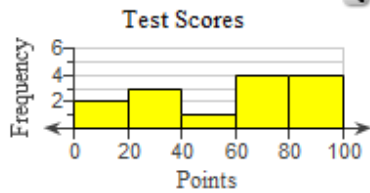


A

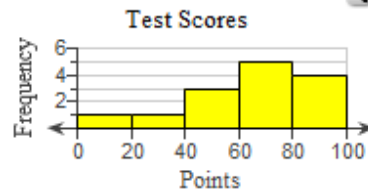
B.



C.



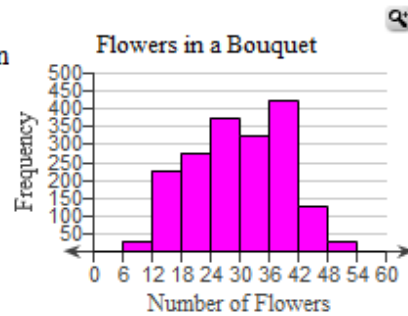
D.



Floral Arrangements A flower shop tracks the number of flowers in each bouquet it sells. The histogram shows the number of flowers in the bouquets it sold last year.

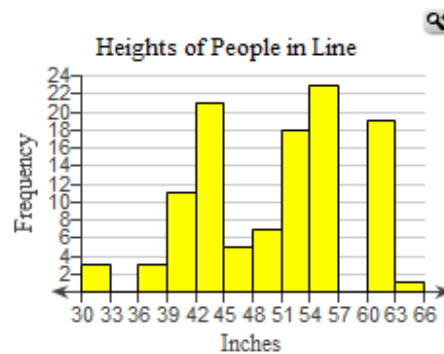
Which bouquets were most popular? Were bouquets with 36 flowers among the most popular?

The bouquets w/ 36-42 flowers were most popular.



For a ride at the county fair, you must be at least 4 feet 6 inches tall. The histogram shows the heights of people who entered the line for this ride. How many people could not get on the ride?

68



TYPES OF NUMBERS

When two or more integers are multiplied together, each number is a factor of the product. Non-negative integers that have exactly two factors, namely, one and itself, are called prime numbers. Except for one and zero, the other non-prime numbers are composite. One has only one factor, so it is neither prime nor composite. It is also the Multiplicative Identity since one multiplied by any number does not change the value. Written in symbols, $1 \cdot n = n$. Zero is the Additive Identity since adding zero to any number does not change the value. Written in symbols, $0 + n = n$.

For more information, see the Math Notes box in Lesson 1.2.3 of the *Core Connections, Course 1* text.

Example 1

Identify each integer as prime, composite, or neither.

- 6 6 has factors of 1, 6, 2, and 3 so 6 is composite.
 17 17 has factors of 1 and 17 so 17 is prime.
 1 1 has only 1 as a factor so 1 is neither.

Example 2

For each composite number, factor it into primes and write the number as a product of primes using exponents as possible.

- 24 $24 = 4 \cdot 6 = 2 \cdot 2 \cdot 2 \cdot 3 = 2^3 \cdot 3$
 45 $45 = 9 \cdot 5 = 3 \cdot 3 \cdot 5 = 3^2 \cdot 5$

Problems

Identify each integer as prime, composite, or neither. For each composite number, factor it into primes and write the number as a product of primes, using exponents as possible.

- | | | | |
|-------|-------|--------|--------|
| 1. 30 | 2. 15 | 3. 16 | 4. 20 |
| 5. 11 | 6. 38 | 7. 29 | 8. 100 |
| 9. 53 | 10. 0 | 11. 54 | 12. 96 |

Answers

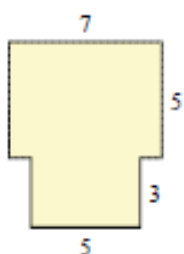
- | | | | |
|------------------------|-----------------|-------------------|--------------------|
| 1. $2 \cdot 3 \cdot 5$ | 2. $3 \cdot 5$ | 3. 2^4 | 4. $2^2 \cdot 5$ |
| 5. prime | 6. $2 \cdot 19$ | 7. prime | 8. $2^2 \cdot 5^2$ |
| 9. prime | 10. neither | 11. $2 \cdot 3^3$ | 12. $2^5 \cdot 3$ |



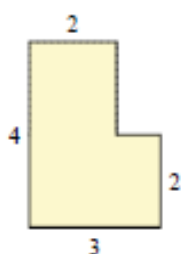
Find the total area of each shape. Measurement is in millimeters (mm). Not to scale.

Answers

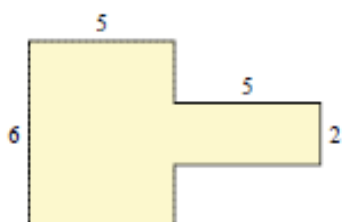
1)



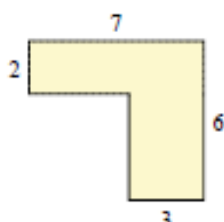
2)



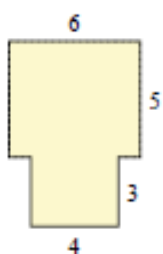
3)



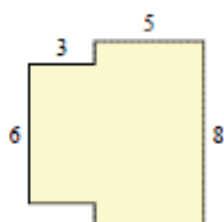
4)



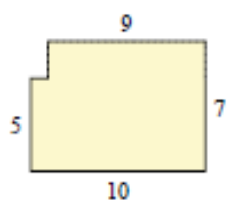
5)



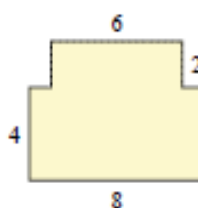
6)



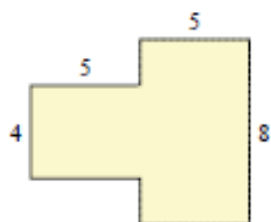
7)



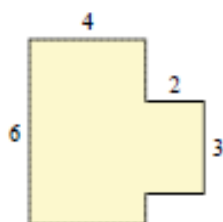
8)



9)



10)



1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

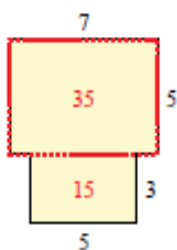


Determining Rectilinear Area

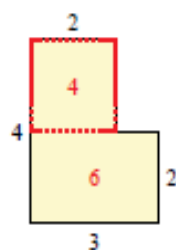
Name: **Answer Key**

Find the total area of each shape. Measurement is in millimeters (mm). Not to scale.

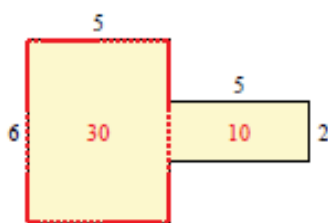
1)



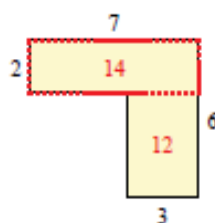
2)



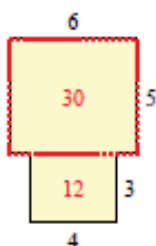
3)



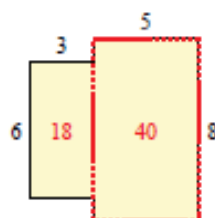
4)



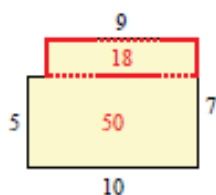
5)



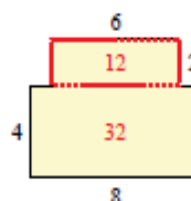
6)



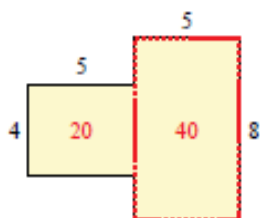
7)



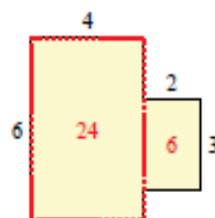
8)



9)



10)



Answers

1. 50 mm²

2. 10 mm²

3. 40 mm²

4. 26 mm²

5. 42 mm²

6. 58 mm²

7. 68 mm²

8. 44 mm²

9. 60 mm²

10. 30 mm²



Finding Side Length (Given Perimeter)

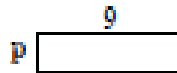
Name: _____

Determine the value of 'P'.

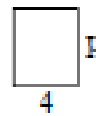
1) Perimeter = 26



2) Perimeter = 22



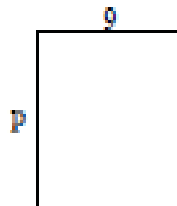
3) Perimeter = 16



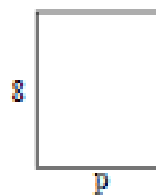
4) Perimeter = 24



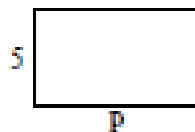
5) Perimeter = 36



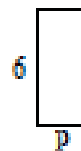
6) Perimeter = 32



7) Perimeter = 30



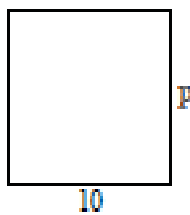
8) Perimeter = 18



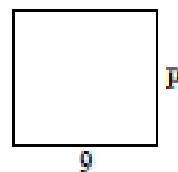
9) Perimeter = 20



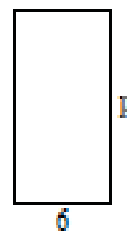
10) Perimeter = 38



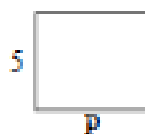
11) Perimeter = 32



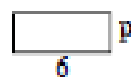
12) Perimeter = 32



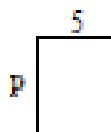
13) Perimeter = 24



14) Perimeter = 16



15) Perimeter = 20



Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

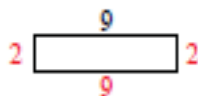


Determine the value of 'P'.

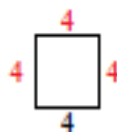
1) Perimeter = 26



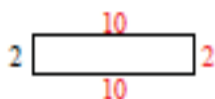
2) Perimeter = 22



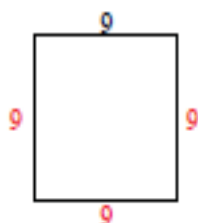
3) Perimeter = 16



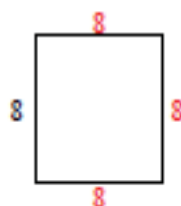
4) Perimeter = 24



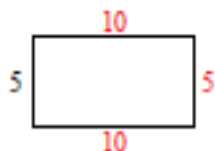
5) Perimeter = 36



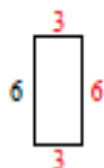
6) Perimeter = 32



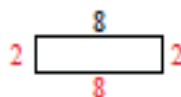
7) Perimeter = 30



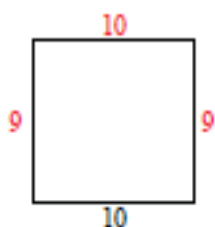
8) Perimeter = 18



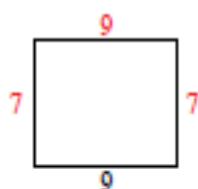
9) Perimeter = 20



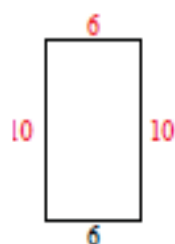
10) Perimeter = 38



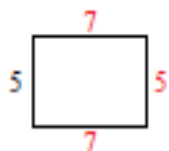
11) Perimeter = 32



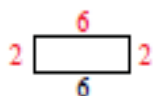
12) Perimeter = 32



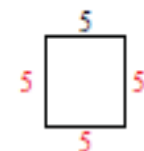
13) Perimeter = 24



14) Perimeter = 16



15) Perimeter = 20

Answers

- 10
- 2
- 4
- 10
- 9
- 8
- 10
- 3
- 2
- 9
- 7
- 10
- 7
- 2
- 5

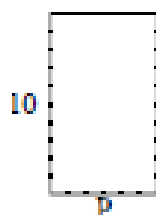


Finding Side Length (Given Area)

Name: _____

Determine the value of 'P'.

1) Area = 60 u^2



2) Area = 18 u^2



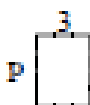
3) Area = 27 u^2



4) Area = 21 u^2



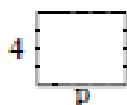
5) Area = 12 u^2



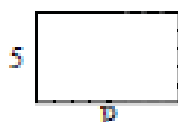
6) Area = 18 u^2



7) Area = 20 u^2



8) Area = 40 u^2



9) Area = 9 u^2



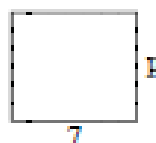
10) Area = 8 u^2



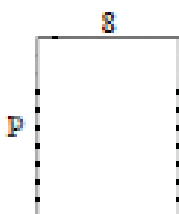
11) Area = 28 u^2



12) Area = 42 u^2



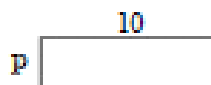
13) Area = 80 u^2



14) Area = 14 u^2



15) Area = 30 u^2



Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

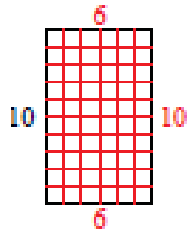


Finding Side Length (Given Area)

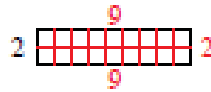
Name: **Answer Key**

Determine the value of 'P'.

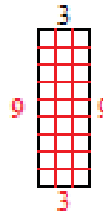
1) Area = 60 u^2



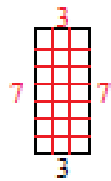
2) Area = 18 u^2



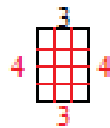
3) Area = 27 u^2



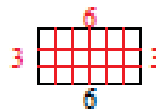
4) Area = 21 u^2



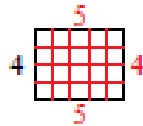
5) Area = 12 u^2



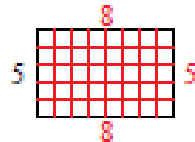
6) Area = 18 u^2



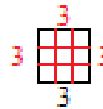
7) Area = 20 u^2



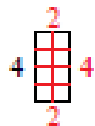
8) Area = 40 u^2



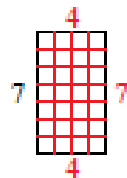
9) Area = 9 u^2



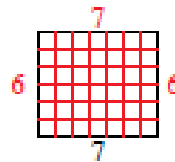
10) Area = 8 u^2



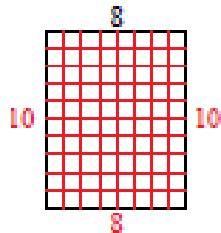
11) Area = 28 u^2



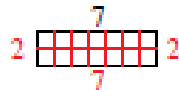
12) Area = 42 u^2



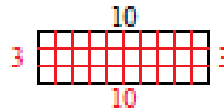
13) Area = 80 u^2



14) Area = 14 u^2



15) Area = 30 u^2



Answers

1. 6

2. 9

3. 9

4. 7

5. 4

6. 3

7. 5

8. 8

9. 3

10. 2

11. 4

12. 6

13. 10

14. 2

15. 3

Write the Place and Value of Each Number.

- | | | | |
|------|--------------|--|--|
| 1) | 527,194
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Hundreds</u>
<u>100</u> |
| 2) | 898,732
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Thousands</u>
<u>8,000</u> |
| 3) | 883,933
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Hundred Thousands</u>
<u>800,000</u> |
| 4) | 742,138
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Tens</u>
<u>30</u> |
| 5) | 658,670
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Thousands</u>
<u>8,000</u> |
| 6) | 488,524
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Hundreds</u>
<u>500</u> |
| 7) | 821,962
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Ten Thousands</u>
<u>20,000</u> |
| 8) | 685,232
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Tens</u>
<u>30</u> |
| 9) | 235,558
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Ones</u>
<u>8</u> |
| 10) | 632,168
^ | What place is the selected digit in?
What is the value of the selected digit? | <u>Ten Thousands</u>
<u>30,000</u> |



Student Name: _____

Score: _____

Compare

Fill in the place holder with $<$, $>$ or $=$:

$4.45 \square -4.45$

$-0.707 \square 07.07$

$-18.2 \square 18.0$

$-3.21 \square -3.12$

$39.56761 \square -39.0745$

$-2.5 \square 125.0$

$-1.02 \square -1.02$

$-0.33 \square -0.3$

$-0.457 \square -0.456$

$-6.78 \square -67.8$

$1.674 \square -1.678$

$7.8 \square -6.45$

$3.678 \square -3.679$

$13.5 \square -13.56$

$84.832 \square -84.831$

$-0.4 \square 0.40$

$-6.76 \square -9.43$

$-0.5748 \square -0.578$

$-0.06 \square 0.6$

$-4.44 \square -44.4$

$-36.4 \square 36.4$

Student Name: _____

Score: _____

Answers

4.45 -4.45

-0.707 07.07

-18.2 18.0

-3.21 -3.12

39.56761 -39.0745

-2.5 125.0

-1.02 -1.02

-0.33 -0.3

-0.457 -0.456

-6.78 -67.8

1.674 -1.678

7.8 -6.45

3.678 -3.679

13.5 -13.56

84.832 -84.831

-0.4 0.40

-6.76 -9.43

-0.5748 -0.578

-0.06 0.6

-4.44 -44.4

-36.4 36.4



Round each number to the correct place value.

Answers

- | | | | |
|--|---------|-------|-----------|
| 1) Round to the nearest tenth. | 8.54 | _____ | 1. _____ |
| 2) Round to the nearest whole number. | 99.59 | _____ | 2. _____ |
| 3) Round to the nearest tenth. | 310.286 | _____ | 3. _____ |
| 4) Round to the nearest whole number. | 6.4 | _____ | 4. _____ |
| 5) Round to the nearest whole number. | 6.805 | _____ | 5. _____ |
| 6) Round to the nearest tenth. | 9.725 | _____ | 6. _____ |
| 7) Round to the nearest hundredth. | 118.380 | _____ | 7. _____ |
| 8) Round to the nearest tenth. | 90.69 | _____ | 8. _____ |
| 9) Round to the nearest tenth. | 65.85 | _____ | 9. _____ |
| 10) Round to the nearest whole number. | 70.59 | _____ | 10. _____ |
| 11) Round to the nearest hundredth. | 76.684 | _____ | 11. _____ |
| 12) Round to the nearest hundredth. | 815.755 | _____ | 12. _____ |
| 13) Round to the nearest tenth. | 877.71 | _____ | 13. _____ |
| 14) Round to the nearest hundredth. | 12.261 | _____ | 14. _____ |
| 15) Round to the nearest whole number. | 16.4 | _____ | 15. _____ |
| 16) Round to the nearest whole number. | 95.81 | _____ | 16. _____ |
| 17) Round to the nearest hundredth. | 2.408 | _____ | 17. _____ |
| 18) Round to the nearest hundredth. | 3.993 | _____ | 18. _____ |
| 19) Round to the nearest whole number. | 76.3 | _____ | 19. _____ |
| 20) Round to the nearest hundredth. | 716.514 | _____ | 20. _____ |



Round each number to the correct place value.

			<u>Answers</u>
1) Round to the nearest tenth.	8.54	<u>8.5</u>	1. <u>8.5</u>
2) Round to the nearest whole number.	99.59	<u>100</u>	2. <u>100</u>
3) Round to the nearest tenth.	310.286	<u>310.3</u>	3. <u>310.3</u>
4) Round to the nearest whole number.	6.4	<u>6</u>	4. <u>6</u>
5) Round to the nearest whole number.	6.805	<u>7</u>	5. <u>7</u>
6) Round to the nearest tenth.	9.725	<u>9.7</u>	6. <u>9.7</u>
7) Round to the nearest hundredth.	118.380	<u>118.38</u>	7. <u>118.38</u>
8) Round to the nearest tenth.	90.69	<u>90.7</u>	8. <u>90.7</u>
9) Round to the nearest tenth.	65.85	<u>65.9</u>	9. <u>65.9</u>
10) Round to the nearest whole number.	70.59	<u>71</u>	10. <u>71</u>
11) Round to the nearest hundredth.	76.684	<u>76.68</u>	11. <u>76.68</u>
12) Round to the nearest hundredth.	815.755	<u>815.76</u>	12. <u>815.76</u>
13) Round to the nearest tenth.	877.71	<u>877.7</u>	13. <u>877.7</u>
14) Round to the nearest hundredth.	12.261	<u>12.26</u>	14. <u>12.26</u>
15) Round to the nearest whole number.	16.4	<u>16</u>	15. <u>16</u>
16) Round to the nearest whole number.	95.81	<u>96</u>	16. <u>96</u>
17) Round to the nearest hundredth.	2.408	<u>2.41</u>	17. <u>2.41</u>
18) Round to the nearest hundredth.	3.993	<u>3.99</u>	18. <u>3.99</u>
19) Round to the nearest whole number.	76.3	<u>76</u>	19. <u>76</u>
20) Round to the nearest hundredth.	716.514	<u>716.51</u>	20. <u>716.51</u>

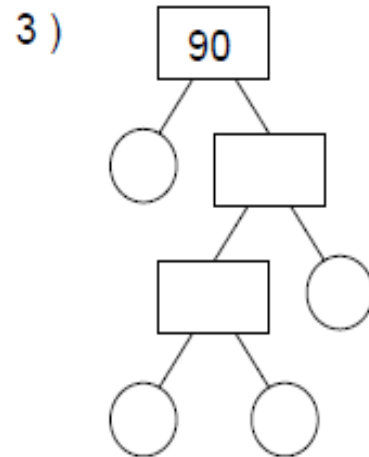
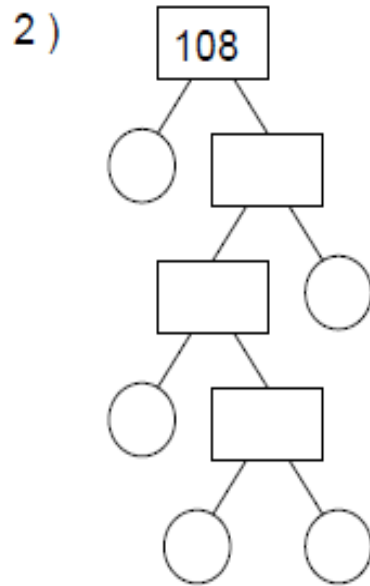
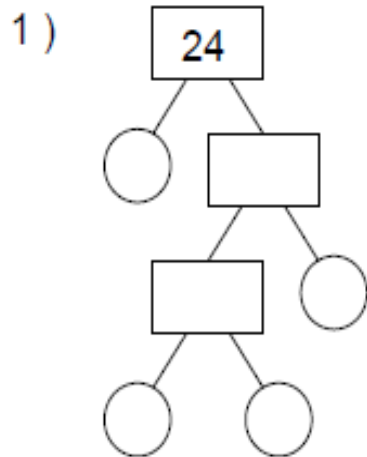
Name : _____

Score : _____

Teacher : _____

Date : _____

Find the Prime Factors of the Numbers



Prime Factors

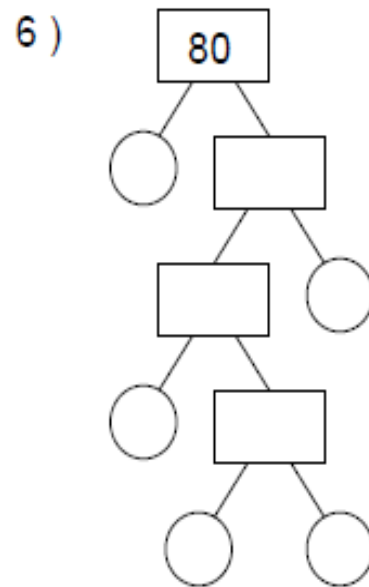
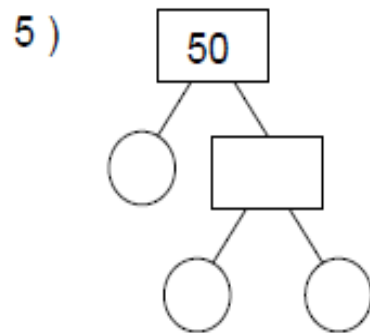
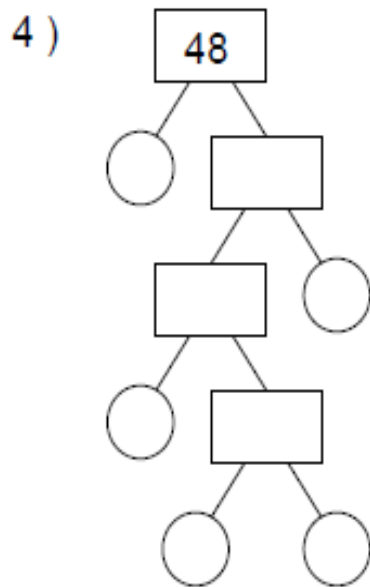
 x x x = 24

Prime Factors

 x x x x = 108

Prime Factors

 x x x = 90



Prime Factors

 x x x x = 48

Prime Factors

 x x = 50

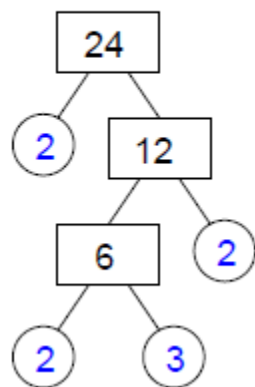
Prime Factors

 x x x x = 80



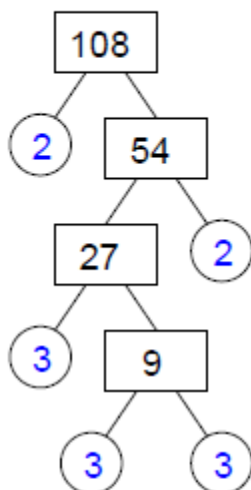
Find the Prime Factors of the Numbers

1)



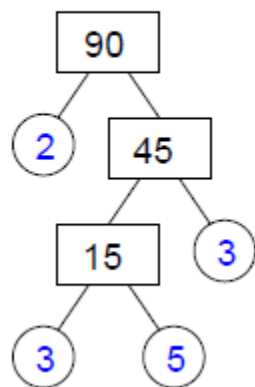
Factors
 $2 \times 2 \times 2 \times 3 = 24$

2)



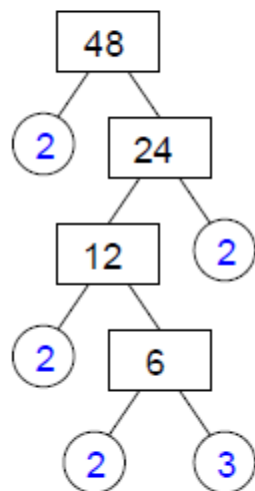
Factors
 $2 \times 2 \times 3 \times 3 \times 3 = 108$

3)



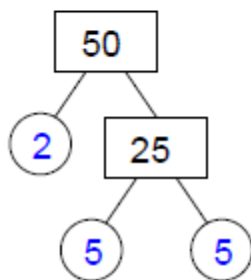
Factors
 $2 \times 3 \times 3 \times 5 = 90$

4)



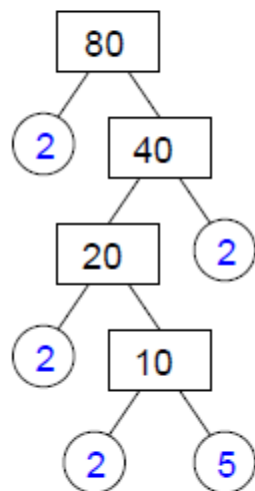
Factors
 $2 \times 2 \times 2 \times 2 \times 3 = 48$

5)



Factors
 $2 \times 5 \times 5 = 50$

6)



Factors
 $2 \times 2 \times 2 \times 2 \times 5 = 80$

