

Summer Math  
2016  
for students who will be taking Math 5

This packet is designed to cover some of the major concepts learned in 4th grade math this past year. Please work on these handouts over the summer, and be ready to hand the packet in on the second day of classes.

Do your best, and do these handouts a little at a time, so that you keep your “head in the game” during the summer, and you are ready to hit the ground running in August!

Other websites you can use for math practice include:

[www.math-drills.com](http://www.math-drills.com)

[www.ixl.com](http://www.ixl.com)

[www.thatquiz.org](http://www.thatquiz.org)

[www.math.com](http://www.math.com)

**STUDY LINK**  
**2-3**

# Place Value in Whole Numbers



1. Write the number that has

6 in the millions place,  
 4 in the thousands place,  
 7 in the ten-millions place,  
 5 in the hundred-thousands place,  
 8 in the hundred-millions place, and  
 0 in the remaining places.

6  
 \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

2. Write the number that has

7 in the ten-thousands place,  
 3 in the millions place,  
 1 in the hundred-thousands place,  
 8 in the tens place,  
 2 in the ten-millions place, and  
 0 in the remaining places.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



3. Compare the two numbers you wrote in Problems 1 and 2.

Which is greater? \_\_\_\_\_

4. The 6 in 46,711,304 stands for 6 million, or 6,000,000.

- a. The 4 in 508,433,529 stands for 400 \_\_\_\_\_, or \_\_\_\_\_.
- b. The 8 in 182,945,777 stands for 80 \_\_\_\_\_, or \_\_\_\_\_.
- c. The 5 in 509,822,119 stands for 500 \_\_\_\_\_, or \_\_\_\_\_.
- d. The 3 in 450,037,111 stands for 30 \_\_\_\_\_, or \_\_\_\_\_.

**Try This**

5. Write the number that is 1 hundred thousand more.

- a. 210,366 310,366
- b. 496,708 \_\_\_\_\_
- c. 321,589 \_\_\_\_\_
- d. 945,620 \_\_\_\_\_

6. Write the number that is 1 million more.

- a. 3,499,702 4,499,702
- b. 12,877,000 \_\_\_\_\_
- c. 29,457,300 \_\_\_\_\_
- d. 149,691,688 \_\_\_\_\_

**Practice**

7. 32, 45, 58, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Rule: \_\_\_\_\_

8. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 89, 115, 141

Rule: \_\_\_\_\_

**STUDY LINK**  
**5•10**

# Rounding



1. Round the seating capacities in the table below to the nearest thousand.

| Women's National Basketball Association<br>Seating Capacity of Home Courts |                  |                              |
|--|------------------|------------------------------|
| Team   | Seating Capacity | Rounded to the Nearest 1,000 |
| Charlotte Sting  | 24,042           | 24,000                       |
| Cleveland Rockers  | 20,562           |                              |
| Detroit Shock  | 22,076           |                              |
| New York Liberty   | 19,763           |                              |
| Phoenix Mercury  | 19,023           |                              |
| Sacramento Monarchs  | 17,317           |                              |
| San Antonio Stars  | 18,500           |                              |
| Seattle Storm  | 17,072           |                              |

2. Look at your rounded numbers. Which stadiums have about the same capacity?
- \_\_\_\_\_

3. Round the population figures in the table below to the nearest million.

| U.S. Population by Official Census from 1940 to 2000 |             |                                |
|--|-------------|--------------------------------|
| Year   | Population  | Rounded to the Nearest Million |
| 1940   | 132,164,569 | 132,000,000                    |
| 1960   | 179,323,175 |                                |
| 1980   | 226,542,203 |                                |
| 2000   | 281,421,906 |                                |

Source for both tables: *The World Almanac and Book of Facts 2004*

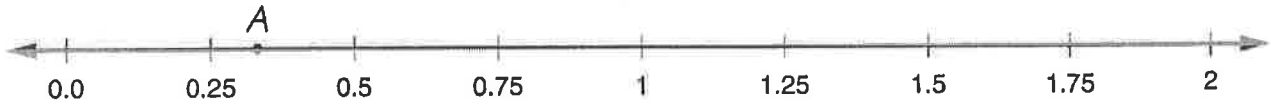
**STUDY LINK**  
**4•3**

# Ordering Decimals



Mark the approximate locations of the decimals and fractions on the number lines below. Rename fractions as decimals as necessary.

1.



A 0.33

B 1.6

C 0.7

D 1.01

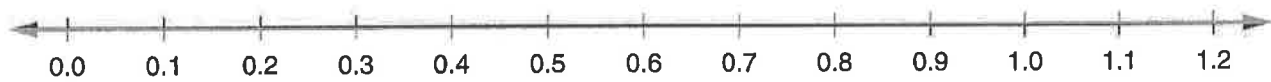
E 1.99

F 1.33

G 0.1

H 0.8

2.



I 0.67

J 0.05

K  $\frac{75}{100}$ 

L 0.49

M 0.99

N 1.15

O  $\frac{25}{100}$ 

P 0.101

Q 0.55

R 0.88

Use decimals. Write 3 numbers that are between the following:

3. \$5 and \$6

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

4. 4 centimeters and  
5 centimeters

\_\_\_\_\_ cm

\_\_\_\_\_ cm

\_\_\_\_\_ cm

5. 21 seconds and  
22 seconds

\_\_\_\_\_ sec

\_\_\_\_\_ sec

\_\_\_\_\_ sec

6. 8 dimes and 9 dimes

\$ \_\_\_\_\_

\$ \_\_\_\_\_

\$ \_\_\_\_\_

7. 2.15 meters and  
2.17 meters

\_\_\_\_\_ m

\_\_\_\_\_ m

\_\_\_\_\_ m

8. 0.8 meter and 0.9 meter

\_\_\_\_\_ m

\_\_\_\_\_ m

\_\_\_\_\_ m

**Practice**

9.  $x + 17 = 23$   $x =$  \_\_\_\_\_ 10.  $5 * n = 35$   $n =$  \_\_\_\_\_ 11.  $32 / b = 4$   $b =$  \_\_\_\_\_



**STUDY LINK**  
**5•2**

# Extended Multiplication Facts



Solve mentally.

1.  $6 * 7 =$  \_\_\_\_\_

$6 * 70 =$  \_\_\_\_\_

$60 * 7 =$  \_\_\_\_\_

$60 * 70 =$  \_\_\_\_\_

$600 * 7 =$  \_\_\_\_\_

$60 * 700 =$  \_\_\_\_\_

2.  $9 * 3 =$  \_\_\_\_\_

$9 * 30 =$  \_\_\_\_\_

$90 * 3 =$  \_\_\_\_\_

$90 * 30 =$  \_\_\_\_\_

$900 * 3 =$  \_\_\_\_\_

$90 * 300 =$  \_\_\_\_\_

3.  $4 * 8 =$  \_\_\_\_\_

$4 * 80 =$  \_\_\_\_\_

$40 * 8 =$  \_\_\_\_\_

$40 * 80 =$  \_\_\_\_\_

$400 * 8 =$  \_\_\_\_\_

$40 * 800 =$  \_\_\_\_\_

4.  $5 *$  \_\_\_\_\_  $= 15$

$30 *$  \_\_\_\_\_  $= 150$

$30 *$  \_\_\_\_\_  $= 1,500$

\_\_\_\_\_  $* 50 = 150$

\_\_\_\_\_  $* 500 = 1,500$

$30 *$  \_\_\_\_\_  $= 15,000$

5. \_\_\_\_\_  $* 9 = 54$

\_\_\_\_\_  $* 90 = 540$

\_\_\_\_\_  $* 90 = 5,400$

$60 *$  \_\_\_\_\_  $= 540$

$6 *$  \_\_\_\_\_  $= 5,400$

$6 *$  \_\_\_\_\_  $= 54,000$

6.  $8 *$  \_\_\_\_\_  $= 40$

$8 *$  \_\_\_\_\_  $= 4,000$

$80 *$  \_\_\_\_\_  $= 4,000$

\_\_\_\_\_  $* 50 = 400$

\_\_\_\_\_  $* 5 = 400$

\_\_\_\_\_  $* 500 = 400,000$

**Practice**

7. \_\_\_\_\_  $= 6.3 + 8.7$

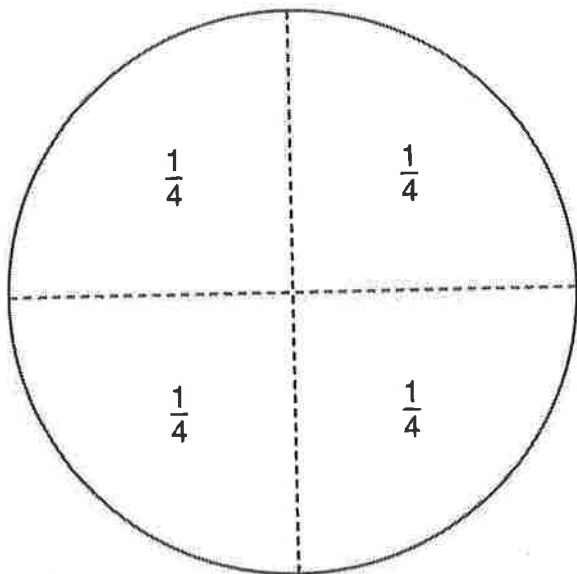
8.  $7.36 + 2.14 =$  \_\_\_\_\_

9. \_\_\_\_\_  $= 9.74 - 5.48$

10. \_\_\_\_\_  $= 4.6 - 2.8$

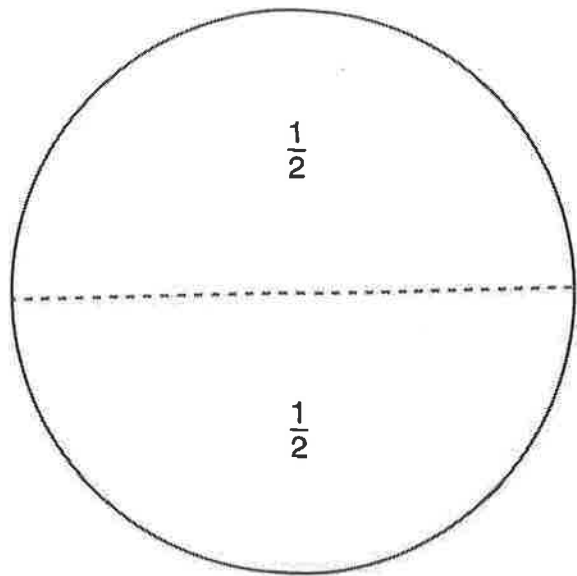
**LESSON**  
**7•6**
**Equivalent Fractions** *continued*


3. Cover  $\frac{2}{4}$  of the circle with eighths.



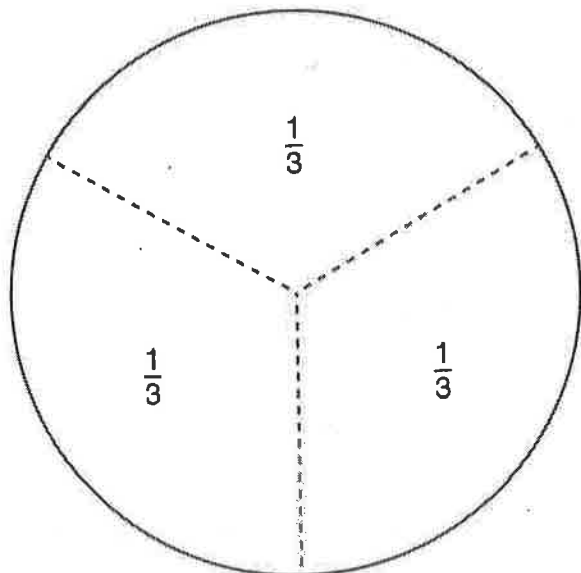
$$\frac{2}{4} = \frac{\square}{8}$$

4. Cover  $\frac{1}{2}$  of the circle with sixths.



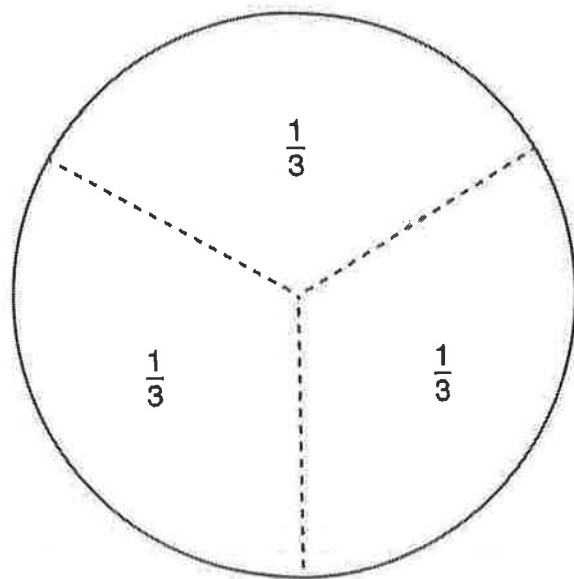
$$\frac{1}{2} = \frac{\square}{6}$$

5. Cover  $\frac{1}{3}$  of the circle with sixths.



$$\frac{1}{3} = \frac{\square}{6}$$

6. Cover  $\frac{2}{3}$  of the circle with sixths.



$$\frac{2}{3} = \frac{\square}{6}$$

**STUDY LINK**  
**7•8**
**Fractions and Decimals**


Write 3 equivalent fractions for each decimal.

**Example:**

$$0.8 \quad \frac{8}{10} \quad \frac{4}{5} \quad \frac{80}{100}$$

1. 0.20      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

2. 0.6      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

3. 0.50      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

4. 0.75      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

Write an equivalent decimal for each fraction.

5.  $\frac{3}{10}$  \_\_\_\_\_

6.  $\frac{63}{100}$  \_\_\_\_\_

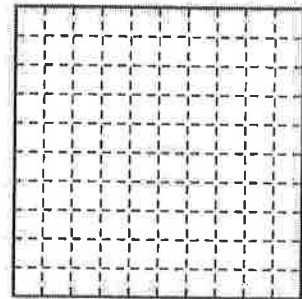
7.  $\frac{7}{10}$  \_\_\_\_\_

8.  $\frac{2}{5}$  \_\_\_\_\_

9. Shade more than  $\frac{53}{100}$  of the square and less than  $\frac{8}{10}$  of the square. Write the value of the shaded part as a decimal and a fraction.

Decimal: \_\_\_\_\_

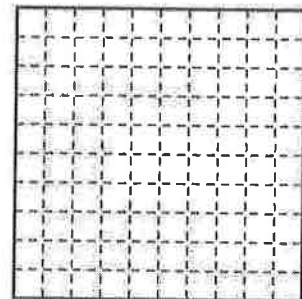
Fraction: \_\_\_\_\_



10. Shade more than  $\frac{11}{100}$  of the square and less than  $\frac{1}{4}$  of the square. Write the value of the shaded part as a decimal and a fraction.

Decimal: \_\_\_\_\_

Fraction: \_\_\_\_\_


**Practice**

11. \_\_\_\_\_ =  $78 * 9$

12.  $461 * 7 =$  \_\_\_\_\_

13. \_\_\_\_\_ =  $39 * 25$



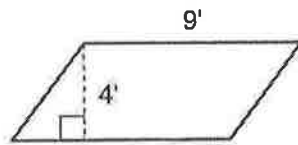
**STUDY LINK**  
**8•6**

# Areas of Parallelograms



Find the area of each parallelogram. *\*Area = base x height*

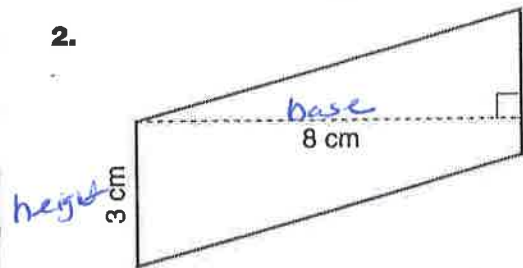
1.



Number model: *Ex:  $9' \times 4' = \text{Area}$*

Area = \_\_\_\_\_ square feet

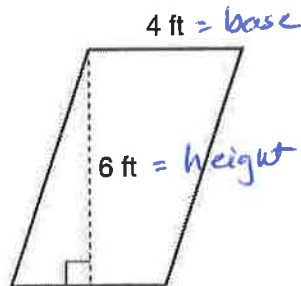
2.



Number model: \_\_\_\_\_

Area = \_\_\_\_\_ square centimeters

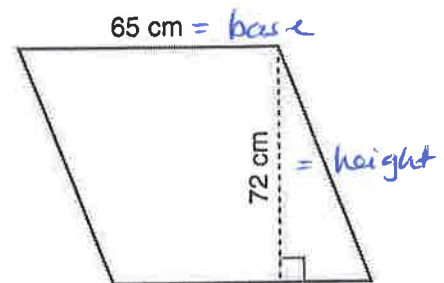
3.



Number model: \_\_\_\_\_

Area = \_\_\_\_\_ square feet

4.



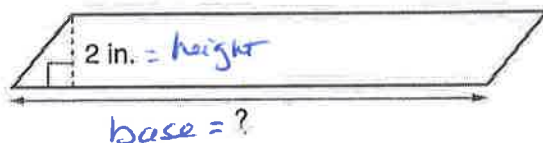
Number model: \_\_\_\_\_

Area = \_\_\_\_\_ square centimeters

**Try This**

The area of each parallelogram is given. Find the length of the base.

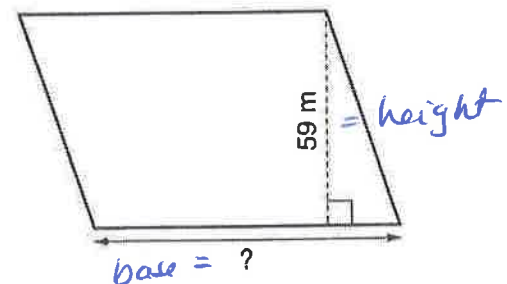
5.



Area = 26 square inches

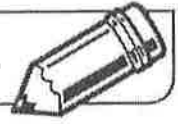
base = \_\_\_\_\_ inches

6.



Area = 5,015 square meters

base = \_\_\_\_\_ meters

**LESSON**  
**2•8****Measuring and Drawing Line Segments**

Measure the following line segments to the nearest  $\frac{1}{2}$  centimeter.

1. \_\_\_\_\_

About \_\_\_\_\_ cm

2. \_\_\_\_\_

About \_\_\_\_\_ cm

3. \_\_\_\_\_

About \_\_\_\_\_ cm

4. \_\_\_\_\_

About \_\_\_\_\_ cm

Draw line segments having the following lengths:

5. 8 centimeters

6. 10 centimeters

7. 3.5 centimeters

**Try This**

8. Draw a line segment having the following length: 46 millimeters

**STUDY LINK**  
**2·6**

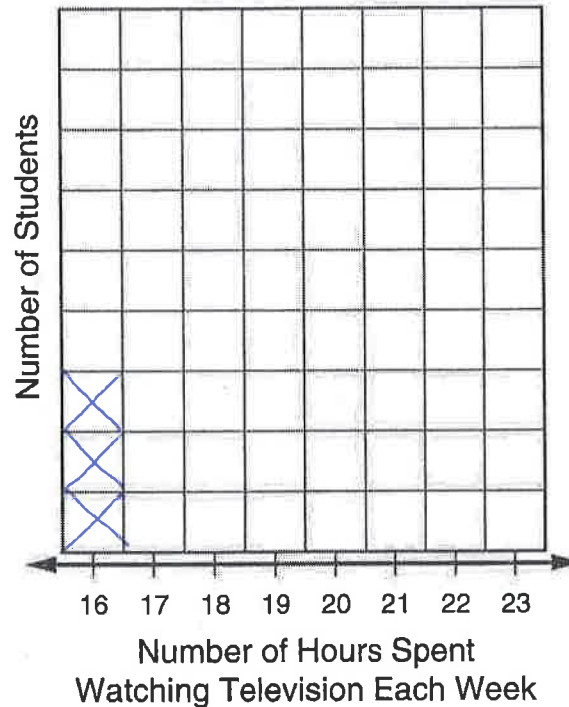
**Line Plots**



The students in Sylvia's class estimated how much time they spend watching television each week. The tally chart below shows the data they collected.

1. Construct a line plot for the data.  
*The first column has been done for you.* **Student Data on Television Time**

| Number of Hours per Week Spent Watching TV | Number of Students |
|--|--------------------|
| 16   | ///                |
| 17   | ///                |
| 18   |                    |
| 19   | ####               |
| 20   | ####               |
| 21   |                    |
| 22   | ####               |
| 23   |                    |



2. Find the following landmarks for the data:

- a. The maximum number of hours spent watching television each week. \_\_\_\_\_ hours
- b. minimum \_\_\_\_\_ hours
- c. range \_\_\_\_\_ hours
- d. mode \_\_\_\_\_ hours
- e. median \_\_\_\_\_ hours

3. Estimate the amount of time that you watch television each week. \_\_\_\_\_ hours

**Try This**

*The mean is found by adding all the data points and then dividing the sum by the number of data points.*

4. Calculate the mean number of hours Sylvia and her classmates spent watching TV each week. \_\_\_\_\_ hours

*you may use a calculator!*

**Practice**

- 5.  $80 + 30 =$  \_\_\_\_\_
- 6. \_\_\_\_\_  $= 90 + 90$
- 7. \_\_\_\_\_  $= 70 + 60$
- 8.  $120 + 30 =$  \_\_\_\_\_