

Name: _____ Date: _____

1. Which equation correctly show the relationship between 4,620 and 462?

- A. $4,620 = 100 \times (400 + 60 + 2)$
- B. $4,620 = 10 \times (4 + 6 + 2)$
- C. $4,620 = 10 \times (400 + 60 + 2)$
- D. $4,620 = \frac{1}{10} \times (6 + 6 + 2)$

2. Joel says, "fifty-eight multiplied by 10 is 580 because when you multiply a number by ten, you add a zero to the end of it." Do you agree or disagree with Joel? Explain your reasoning.

3. Kayleen and Chi have to create two six-digit numbers using the digits 1 through 6. The numbers they have started to create are shown below.

Kayleen's number					
_	1	3	,	4	_

Chi's number					
1	_	_	,	3	4

a. Which of the following digits in Kayleen's number have a value that is 10 times as much as the value of the same digit in Chi's number? Circle all that apply.

1

3

4

b. Explain how you determined which digits to circle in Part (a).

4. There are almost 60,000 people living in Roxbury, a neighborhood in Boston. There are over 600,000 people living in Boston. There are over 6,000,000 people living in Massachusetts.

How many times more people live in Boston than live in Roxbury? How many times more people live in Massachusetts than live in Boston?

There are almost 6,000 living in the West End, another neighborhood in Boston. How many times more people live in Massachusetts than live in the West End?

5. Complete the following chart.

Standard form	Word form	Expanded form
740		
	Two thousand six	
		$30,000 + 2,000 + 400 + 10 + 9$
	Two hundred fifty-nine thousands eighteen	
		$(1 \times 10,000) + (4 \times 1,000) + (7 \times 10) + (3 \times 1)$
608,920		

6. Determine whether the following comparisons are true or false. Mark your answer with an “X” in the corresponding box.

	True	False
a. $80,462 > (8 \times 1,000) + (4 \times 100) + (6 \times 10) + (2 \times 1)$		
b. 80 thousands 46 tens 2 ones = 80,462		
c. 8 ten thousands 4 thousands 6 tens 2 ones < 80,462		
d. Eighteen thousand six hundred forty-two > 80,462		

7.

a. Identify a digit that, when placed in the blank, make a true comparison.

$$451,367 < 451, _ 82$$

b. Identify all possible digits that can correctly fill in the blank in Part (a).

8. Arrange the following numbers from greatest to least:

53,700

30,507

5,300

70,035

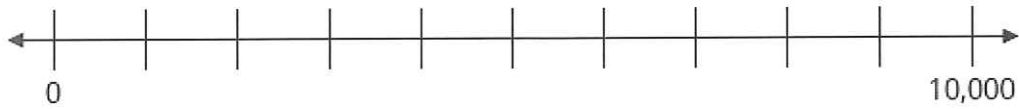
50,730

9. Plot the following points on the number line below:

6129

3948

750



a. Round each number to the nearest 1,000. How can you see this on the number line above?

b. Round each number to the nearest 10,000. How can you see this on the number line above?

10. A number was rounded to the nearest hundred thousand. List all the possible digits that could go in the blank to make a true statement.

$$7_5,964 \approx 800,000$$

11.

a. What is the smallest whole number that will round to 4,000?

b. What is the largest whole number that will round to 4,000?

c. How many different numbers will round to 4,000?

12. Celia, Levon, and Natalia are rounding the following values:

5,763

5,945

5,816

Celia says, "when I round all three values, I get the same number."

Levon says, "when I round all three values, I get the same number for two of the values but a different number for the third value."

Natalia says, "when I round all three values, I get a different number for each value."

Determine to which place each student rounded the three values. Explain how you know.

13. Plot each of the following fractions on the number line below. Then, write each fraction as a decimal.

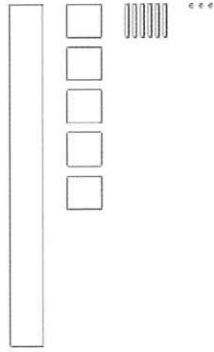


- a. $\frac{8}{100}$
- b. $\frac{23}{100}$
- c. $\frac{7}{10}$
- d. $\frac{51}{100}$

14. Use the following number to fill in the blanks below.

724.19

- a. The digit ____ is in the hundreds place. It has a value of _____.
 - b. The digit ____ is in the tens place. It has a value of _____.
 - c. The digit ____ is in the ones place. It has a value of _____.
 - d. The digit ____ is in the tenths place. It has a value of _____.
 - e. The digit ____ is in the hundredths place. It has a value of _____.
15. Draw base ten blocks to represent each number. Then, write the expanded form of the number in both fraction and decimal form. The first one has been done for you.
- a. 1 ten 5 ones 6 tenths 3 hundredths



Fraction expanded form: $(3 \times 10) + (5 \times 1) + (6 \times \frac{1}{10}) + (3 \times \frac{1}{100})$

Decimal expanded form: $3 \times 10 + 5 \times 1 + 6 \times 0.1 + 3 \times 0.01$

b. 4 tens 7 tenths 2 hundredths

c. 2 ones 3 tenths 6 hundredths

d. 1 ten 7 ones 8 hundredths

16. Compare the following numbers using $<$, $>$, or $=$.

a. 0.9 _____ 0.4

b. 0.26 _____ 0.8

c. 0.3 _____ 0.03

d. 0.7 _____ 0.70

e. 0.51 _____ 0.2

f. 0 _____ 0.47

17. Rob says that 0.31 is greater than 0.8 because 31 is greater than 8.

- Identify the incorrect reasoning in Rob's statement.
- Explain how Rob can correct his reasoning.

18. Determine whether the following equations are true or false. If they are false, change the righthand side of the equation so that it is true.

a. $7 \times \frac{1}{10} = \frac{7}{10}$

b. $3 \times \frac{1}{100} = 3 \frac{1}{100}$

c. $\frac{2}{10} + \frac{9}{100} = \frac{29}{100}$

d. $\frac{8}{100} + \frac{5}{10} = \frac{13}{100}$

e. $\frac{4}{100} + \frac{9}{10} = \frac{49}{100}$

f. $\frac{50}{100} + \frac{20}{100} = \frac{7}{10}$

Mathematics Reference Sheets

Grades 5 -8

Assessment Reference Sheet

Grade 6

1 inch = 2.54 centimeters

1 meter = 39.37 inches

1 mile = 5280 feet

1 mile = 1760 yards

1 mile = 1.609 kilometers

1 kilometer = 0.62 mile

1 pound = 16 ounces

1 pound = 0.454 kilograms

1 kilogram = 2.2 pounds

1 ton = 2000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 gallon = 3.785 liters

1 liter = 0.264 gallons

1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Right Rectangular Prism	$V = Bh$ or $V = lwh$