

Name: _____ Date: _____

1. A number line is shown below.



- Place a dot where the value 230 belongs. Label the dot with the number.
 - Place a dot where the value 320 belongs. Label the dot with the number.
 - Place a dot where the value 305 belongs. Label the dot with the number.
2. Determine the value of the point shown on the number line below. Explain or show your reasoning.



3. After basketball practice, Lola and Kylie each buy a bottle of water the same size. Lola drinks $\frac{3}{5}$ of her water and Kylie drinks $\frac{2}{5}$ of her water. Who drinks the most amount of water? Show or explain your reasoning.

4. Grace is comparing two fractions: $\frac{4}{5}$ and $\frac{4}{7}$. She thinks that because the numerators are equal, then the fractions must be equal.

Grace's thinking is incorrect. Explain why Grace's thinking is incorrect and then write a correct comparison between the fractions $\frac{4}{5}$ and $\frac{4}{7}$ using $<$ or $>$.

5. Compare the fractions below using the symbols $<$, $>$, or $=$.

a. $\frac{3}{8}$ and $\frac{5}{8}$

b. $\frac{2}{5}$ and $\frac{2}{6}$

c. $\frac{5}{10}$ and $\frac{3}{6}$

6. Phil writes these fraction comparisons: $\frac{1}{4} < \frac{1}{3}$ and $\frac{1}{3} < \frac{1}{2}$.

He says, "When comparing two fractions, the lesser fraction has the greater denominator."

- a. Find one digit to complete the comparison below so that it supports Phil's claim. Show or explain your reasoning.

$$\frac{\quad}{6} < \frac{1}{3}$$

- b. Find one digit to complete the comparison below so that it shows Phil's claim is *not always* true. Show or explain your reasoning.

$$\frac{\quad}{6} > \frac{1}{3}$$

7. How are the statements "4 is 2 more than 2" and "4 is 2 times as many as 2" different? Show or explain your thinking.

8. Meghan watched 18 movies. Meghan watched three times as many movies as Rob. Which two equations can be used to find the total number of movies Rob watched?

A. $3 + \underline{\quad} = 18$

B. $3 \times \underline{\quad} = 18$

C. $18 \times 3 = \underline{\quad}$

D. $18 \div 3 = \underline{\quad}$

9. Serena climbs 12 stairs to get to her apartment. Michael climbs 4 times as many stairs as Serena to get to his apartment.

- a. Write an equation that can be used to find m , the number of stairs that Michael climbs. Then solve the equation.

- b. Jackie climbs 60 stairs to get to her apartment. How many times more is the number of stairs Jackie climbs than the number of stairs Serena climbs?

10. At a farm, you can buy strawberries in small, medium, and large size baskets. The large size costs 3 times as much as the medium size. The large size costs 6 times as much as the small size. Each medium size sells for \$2.

How much would it cost to buy 2 large baskets, 1 medium basket, and 3 small baskets?

11. Explain how you know $\frac{5}{8}$ is equivalent to $\frac{5 \times 3}{8 \times 3}$. You may use a model if that is helpful.

12. Explain why the following fractions are equivalent. You can use pictures or words.

a. $\frac{1}{3} = \frac{3}{9}$

b. $\frac{6}{10} = \frac{3}{5}$

C. $\frac{4}{3} = \frac{12}{9}$

13. Make three equivalent fractions using the digits 1 through 9. Do not use any digit more than once.

$$\frac{\square}{\square} = \frac{\square}{\square\square} = \frac{\square}{\square}$$

14. Convert the measurements in the tables below.

Inches	Feet
12	
	4
	6
108	

Yards	Feet
3	
5	
	21
	42

15. Each month, the Moore family drinks 16 gallons of milk and the Siler family goes through 44 quarts of milk. Which family drinks more milk each month? How much more?

16. Kristin has $3\frac{1}{2}$ gallons of water. Alana needs the same amount of water but only has 18 pints. How many more pints of water does Alana need?

17. Which *two* statements below are true?

- A. The product of $\frac{2}{3}$ and 6 is greater than 6.
- B. The product of $\frac{2}{3}$ and 6 is less than $\frac{2}{3}$.
- C. The product of $4\frac{1}{2}$ and 3 is greater than $4\frac{1}{2}$.
- D. The product of $4\frac{1}{2}$ and 3 is less than 3.
- E. The product of $\frac{5}{3}$ and $\frac{8}{3}$ is greater than $\frac{5}{3}$.

18. The Eiffel Tower (in France) is about $3\frac{1}{5}$ times as tall as the Statue of Liberty (in New York). The Statue of Liberty is about $\frac{1}{5}$ as tall as the Willis Tower (in Chicago). Which of these buildings is the tallest? Which is the shortest? Show or explain your reasoning.

Mathematics Reference Sheets

Grades 5 -8

Assessment Reference Sheet

Grade 7

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	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = Bh$