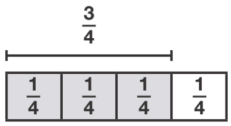
Name:_____

Read each question carefully. Show your work in the box to the right of the question.

Questions		Show your work
1.	Ilana needs d more dollars to buy a new scrapbook that costs \$8.35. She has \$4.88. Solve the equation $\$4.88 + d = \$8.35$ to find how much more money Ilana needs.	
2.	A city has 1,242 law enforcement officers in the police department. If the officers are divided equally into 18 groups, how many officers will be in each group?	
3.	Find the quotient. Use the diagram to help.  $\frac{3}{4} \div \frac{1}{4}$	
4.	SOLVE $2\frac{4}{9} \times 3\frac{1}{2}$	
5.	Which expression has the same value as $3 \div \frac{5}{9}$? Ⓐ $3 \times \frac{5}{9}$ Ⓑ $\frac{1}{3} \div \frac{5}{9}$ Ⓒ $3 \div \frac{9}{5}$ Ⓓ $3 \times \frac{9}{5}$	
6.	Amelia makes necklaces using beads and wire. She starts with 6 feet of wire. How many necklaces can she make? **Jewelry Projects** **Item** / **Wire Required** Bracelet — $\frac{1}{2}$ foot Necklace — $\frac{2}{3}$ foot Earring — $\frac{1}{6}$ foot	

7.	Which point on the number line shows the location of $\frac{5}{4}$? 	
8.	Which comparison is correct? Ⓐ $\frac{1}{2} < \frac{1}{3}$ Ⓑ $\frac{3}{8} > \frac{1}{6}$ Ⓒ $\frac{5}{6} < \frac{3}{4}$ Ⓓ $\frac{3}{5} = \frac{5}{7}$	
9.	What is the opposite value of Emma's score? **Name** / **Score** Cassie / −4 Emma / −12 Juanita / 6	
10.	Which of the following have a value equal to $\lvert 37 \rvert$? ☐ -37 ☐ $\lvert -37 \rvert$ ☐ 0 ☐ $-(-37)$ ☐ 37	
11.	Jeremy listed five rational numbers. Then he drew a number line to display and compare them. **Part A** Plot the numbers on the number line. $\frac{6}{3}$, $-\frac{3}{4}$, 1.5, 0.25, $-\frac{5}{4}$	
12.	Which number has the greater value? Explain. -7 or 4	

13.	Evaluate the expression $(4.5 + 7.6) - 8 \div 2.5$	
14.	How can you find the factors of 12 and 15? Explain.	
15.	Evaluate the expression $6.908 - g$ for $g = 0.173$.	
16.	Select each expression that has a value of 15 when $x = 15$. ☐ $\frac{x}{3} + 10$ ☐ $15{,}521 \div x$ ☐ $(3{,}015 \div x) - 186$ ☐ $20x^2 \div 30$ ☐ $\frac{2x^2}{5} - 25$	
17.	Select the expressions that are equivalent to $12n - 8$. ☐ $3n + 4 + 3n + 4 + 4n$ ☐ $11n + 4 + n - 12$ ☐ $6(6n - 2)$ ☐ $4(3n - 2)$ ☐ $4n + 2^2 + 12 + 8n$	

18.	**Write each phrase as an expression**: *a number x multiplied by 3* *the sum of 25 and 14*	
19.	**Simplify this expression using the distributive property:** 5(k +4) -2k	
20.	What are three other ways to say subtraction/subtract?	
21.	What are two other ways to say multiplication/multiply?	
22.	. Which of the following expressions has a value of 4? Ⓐ $(16 - 12)^2$ Ⓑ $-\|-4\|$ Ⓒ $(96 \div 8) - 2^3$ Ⓓ $2^4 - 4^2$	

23.	A recipe calls for 3 avocados for each bowl of guacamole. How many full bowls of guacamole can be made with 17 avocados? Ⓐ 3 bowls Ⓑ 5 bowls Ⓒ 6 bowls Ⓓ 14 bowls	
24.	What is the greatest common factor of 60 and 75? Ⓐ 3 Ⓑ 6 Ⓒ 15 Ⓓ 25	
25.	Isa finished 30% of his homework in 27 minutes. How many more minutes will it take Isa to complete his homework, assuming that he works at the same pace?	
26.	Solve the equation below for x. $3.25x = 8.125$	
27.	What percent of 50 is 15? Ⓐ 0.3% Ⓑ 7.5% Ⓒ 30% Ⓓ 35%	

28.	The drama club spent $8.50 per person on food for a cast party. The total cost of the food was $229.50. How many people were at the cast party?	
29.	The boiling point of jet fuel is 329°F. Rounded to the nearest degree, what is the temperature in degrees Celsius? Use the formula $C = \frac{5}{9}(F - 32)$, where C represents degrees Celsius and F represents degrees Fahrenheit. Ⓐ 165°C Ⓑ 183°C Ⓒ 201°C Ⓓ 535°C	
30.	Kenji earned the test scores below in English class. 79, 91, 93, 85, 86, and 88 What are the mean and median of his test scores? Ⓐ Mean: 79; Median: 93 Ⓑ Mean: 87; Median: 93 Ⓒ Mean: 87; Median: 87 Ⓓ Mean: 93; Median: 87	