Back-up Quiz

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1. Jason needs to build an 81-foot fence. He puts up the fence at a rate of 15 feet per hour. Based on this information, which of the following statements is a reasonable conclusion?

A. He will have put up less than ½ of the fence after 3 hours.

B. He will have put up more than .67 of the fence after 4 hours.

C. He will have finished more than 40 feet after 2 hours.

D. He will have finished less than 1/3 of the fence in 5 hours.

$\frac{15}{1\text{ hr}} \times \frac{3}{} = 45$

$\frac{60\text{ ft}}{81} = .74$

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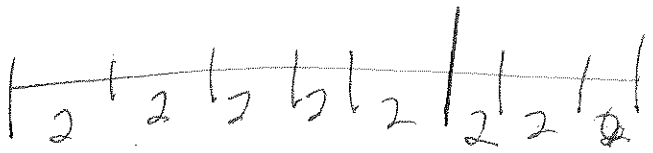
2. Patrick has walked 5/8 of the distance from his house to Kim's house. If Patrick has 6 km left to walk, what is the total distance from Patrick's house to Kim's house?

$\frac{3}{8}$ $\frac{2}{6}$ $\frac{5}{8}$



16 km

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3. Mrs. Farley went to Spoons for lunch and ordered 2 grilled cheese sandwiches at $6.95 each and three bowls of pumpkin soup at $2.95 each. When she went to pay she received a teacher discount of 15% off of her bill. How much was Mrs. Farley's discount? Round your answer to the nearest hundredth.

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4. The model represents the equation x + 7 = 5. What is the value of x?

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A. x = 2

B. x = 12

C. x = -2

D. x = -3

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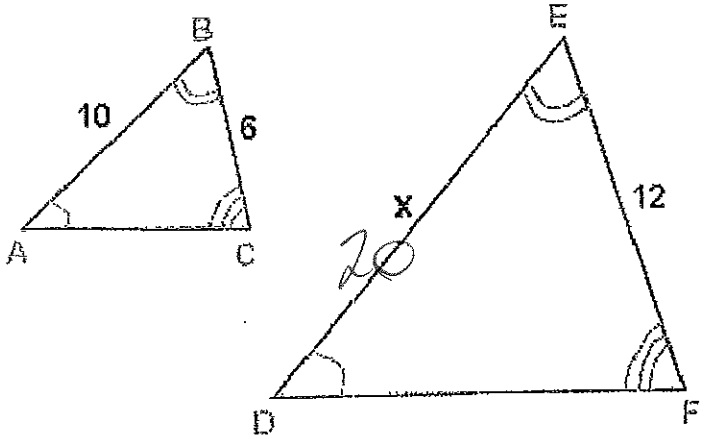
5. The two triangles below are similar.

Identify all three sets of corresponding and congruent angles.

a) A=D B=E C=F

b) AB=DE BC=EF AC=DF

c) _____



6. Using the similar triangles above, how could you find the length of x? Write an equation and solve.

$\frac{10}{x} = \frac{6}{12}$ 120÷6 = 20

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7. A search and rescue helicopter pilot begins his search near Death Valley at 50 feet below sea level. The pilot ascends 25 feet every ten seconds. What will the pilot's elevation be after one minute?

$-50 \quad 10(+25)$

$\times 6 \quad \times 6$

$60 \quad 150$ ~~ft~~

100 ft

8. Write the mixed decimal 7.45 as a mixed number (in simplest form) and an improper fraction.

$7\frac{45}{100} = 7\frac{9}{20} \qquad \frac{149}{20}$

9. Keri is selling Girl Scout cookies. There are 10 boxes in a case. How much did Keri make if she sold 14.5 cases of cookies that sold for $3.75 per box?

$\frac{\text{box } 10}{\text{Case } 1} \quad \frac{x}{14.5}$

145 boxes x 3.75

$543.75

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10. Circle all of the expressions below that would work to solve the following problem.

Janet makes four trays of stuffed mushrooms, with 18 mushrooms on a tray for a football watching party. Joe makes 6 trays of stuffed mushrooms, with 18 mushrooms on a tray. How many total mushrooms will they have for the Orange Bowl party?

A. $m = 4 \times 18 + 6 \times 18$

B. $m = 4 + 6 \times 18$

C. $m = (4 + 6)18$

D. $m = 18 + 6 + 4$

$4 \times 18 + 6 \times 18$

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11. David has 10 feet of licorice rope to split between 6 people (which includes himself.) If he keeps the piece lengths the same, how many people can share 35 feet of licorice rope?

$\frac{\text{ft}}{\text{people}}$ $\frac{10}{6}$ $\frac{35}{x}$

$216 \div 10 = 21.6$

21 people

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12. Sally had to plot the following integers in order, on a number line, from left to right. What is the order of these integers from least to greatest?

4, -7, -3, 3, 6, -5, 9, -8

$-8, -7, -5, -3, 3, 4, 6, 9$

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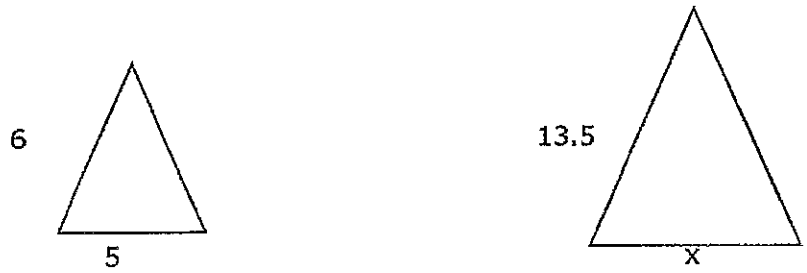
13. Look at the similar triangles below. Find the value for x.



$\frac{6}{13.5} = \frac{5}{x}$ $67.5 \div 6 =$ 11.25

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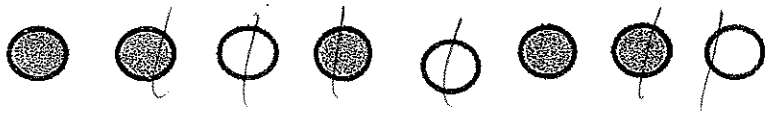
14. Timmy used counters to solve an integer problem. He had dark counters to represent negative numbers and white counters to represent positive numbers. Look at the counters below and determine which problem the model represents.



A. -3 + 4 = 7

B. -5 + 3 = -2

C. -5 - 2 = -7

D. 5 + 3 = 8

$-5 + 3 = -2$

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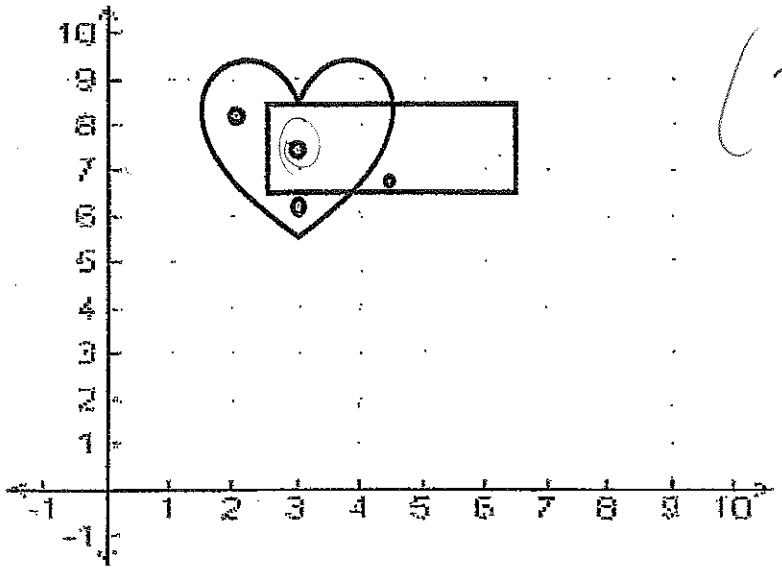
15. Name the ordered pair of the point that is inside both the rectangle and the heart on the coordinate grid below.



(3,7)

16. Plant X grows at a rate of 3 inches every two months. Look at the table below and determine which plant has the same growth rate (inches per month) as Plant X.

Plant	Growth in inches	Time in months
Plant R	12.6	7 1.8
Plant S	7.5	5 1.5
Plant T	10.8	9 1.2
Plant U	11.6	4 2.9

A. Plant R
B. Plant S
C. Plant T
D. Plant U

X
3 in
2 mo
1.5

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17. Tomatoes are sold for $2.39 per pound. If a chef wanted to buy 40 pounds of tomatoes and split the cost with another chef, what method can be used to find out how much each chef would pay?

2.39 × 40 ÷ 2

A. Multiply $2.39 by 2 and then multiply by 40.

B. Multiply $2.39 by 40 and then multiply by 2.

C. Divide 40 by $2.39 and then divide by 2.

D. Multiply $2.39 by 40 and then divide by 2.

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18. Mr. Lima is buying a length of wood for a project. He measured in inches, but the wood is sold by the yard. If he needs 558 inches, how many yards does he need to buy?

Record your answer and fill in the bubbles below. Be sure to use the correct place value.

	1	8	6	■		
	⓪	⓪	⓪	⓪		⓪	⓪
	①	①	①	①		①	①
	②	②	②	②		②	②
	③	③	③	③		③	③
	④	④	④	④		④	④
	⑤	⑤	⑤	⑤		⑤	⑤
	⑥	⑥	⑥	⑥		⑥	⑥
	⑦	⑦	⑦	⑦		⑦	⑦
	⑧	⑧	⑧	⑧		⑧	⑧
	⑨	⑨	⑨	⑨		⑨	⑨

558 ÷ 3

186

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19. Out of a group of 60 students, 24 students are boys. What percentage of students are girls?

Record your answer and fill in the bubbles below. Be sure to use the correct place value.

		6	0	■	6	0
0	0	0	0		0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

G 36

B $\frac{24}{60}$

T

$\frac{36}{60} = \frac{x}{100}$

60%

.60

20. Ming was planning a trip to Western Samoa. The exchange rate is 6 Tala for $2. How many Tala would she get if she exchanges $6?
Record your answer and fill in the bubbles below. Be sure to use the correct place value.

		1	8	■		
0	0	0	0		0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

T 6 / $ 2

$\frac{x}{6}$

36 ÷ 2 = 18

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21. Jose spent $10.46 on office supplies. He spent $1.99 on paper clips, twice that on pens, and the rest on file folders. How much did Jose spend on file folders?

10.46

1.99 + (1.99 × 2) + x

5.97

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4.49

22. The Statue of Liberty is 305 feet tall. Lisa has a replica that is 9 inches tall with the length of the right arm holding the torch measuring 1 ¼ inches. What is the length of the actual right arm holding the torch? Round your answer to the nearest hundredth.

$\frac{\text{Statue } 305}{\text{model } 10.25} = \frac{x}{1}$

134.9 × 1.25

168.65 ft

23. The school bus driver has picked up half of her riders. 48 students ride the bus. Which equation could be used to find *R*, the number of riders who are on the bus?

A. R = 48 ÷ 2

B. R = 48 + 48

C. R = 48 x 2

D. R = 48 – ½

24. The Richter scale measures the size of an earthquake. This table shows some earthquakes and their measures on the Richter scale.

Year	Location of Earthquake	Richter Scale Measure
1755	Portugal	8.75
1906	United States	8.3
1950	India	8.7
1976	China	8.0
2001	Peru	8.1

Which shows these earthquakes ranked from **HIGHEST** to **LOWEST** on the Richter scale?

A. Portugal, India, Peru, United States, China

B. Portugal, India, United States, Peru, China

C. India, Portugal, China, Peru, United States

D. India, Portugal, United States, Peru, China

25. One hundred people were asked to name their favorite fruit. This table shows the fraction of people who chose each fruit.

Fruit Survey

Favorite Fruit	Fraction
Banana	$\frac{1}{5}$ .2
Apple	$\frac{8}{100}$ .08
Orange	$\frac{3}{25}$ .12
Strawberry	$\frac{11}{100}$ .11

Which list shows these fractions written as decimals?

A. Banana 0.20, Apple 0.11, Orange 0.12, Strawberry 0.08

B. Banana 0.20, Apple 0.12, Orange 0.11, Strawberry .008

C. Banana 0.20, Apple 0.11, Orange 0.08, Strawberry 0.12

D. Banana 0.20, Apple 0.08, Orange 0.12, Strawberry 0.11