

Algebra 1 Sec 4-1 to 4-3 Review Fall 2013

1. Use the following letters to write the ratio of P's to B's. B B P P P B P B B B P

2. Solve each proportion. a) $\frac{2}{x+1} = \frac{5}{3x-4}$ b) $\frac{w}{9} = \frac{28}{15}$

3. Use the conversions below to convert 200 $\frac{\text{Liters}}{\text{Minute}}$ into Gallons per Day.

1 Liter = 33.814 ounces 60 minutes = 1 hour
24 hours = 1 day 1 gallon = 4 quarts 32 ounces = 1 quart

4. Karen can read 240 words in 5 minutes. At the same rate how much time will it take her to read 800 words?

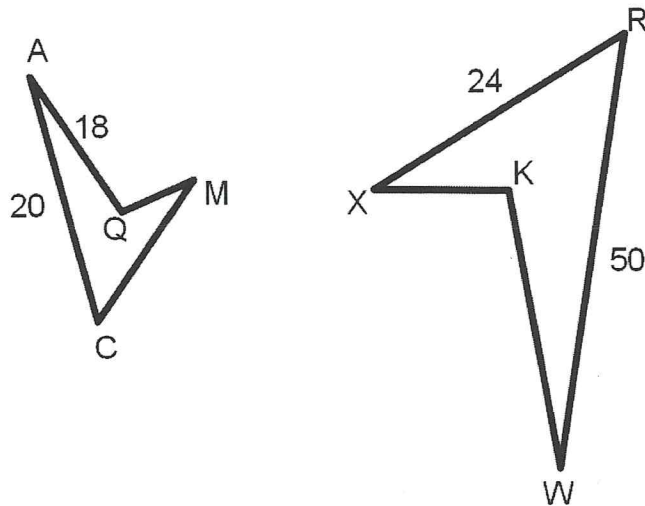
5. On a farm there are only chickens and pigs. The ratio of chickens to pigs in the barn is 13:7. If there are 180 animals on the farm how many of them are pigs?

6. The scale on a drawing is 24 : 5. If the actual object is 1.2 cm long, how long will it be in the drawing?

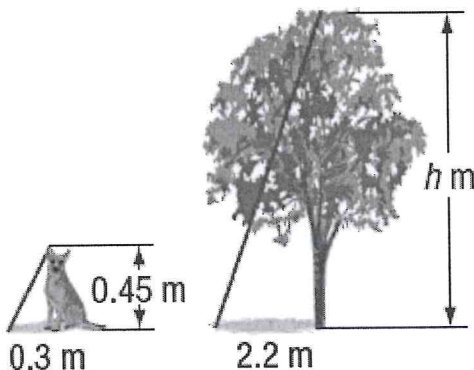
7. The scale on a map is 3 in = 80 miles. If two cities are 7.5 inches apart on the map, how far apart are they in real life?

8. Use the similar figures below to find the length of the following sides:

a) Side CM b) Side KW



9. A sitting dog measures 0.45 meters tall and casts a 0.3 meter long shadow. If a nearby tree casts a 2.2 meter long shadow, how tall is the tree?



10. What is 12% of 500? 11. 24 is what percent of 50? 12. 80% of what is 36?
13. 225 is what percent of 92? 14. 8 is what percent of 950?
15. What is 315% of 80? 16. 15 is 0.06% of what number?
17. A waiter counted his tip money at the end of the night and it was \$46.08. Because he did such a good job this turned out to be 18% of his total sales. Find his total sales for the night.
18. A survey showed that only 21% of the people would vote for a tax increase. If there are 87,000 voters, how many of them would vote for the increase?
19. After randomly weighing 45 of the bags of chips coming off the conveyer belt the quality control worker found that 11 of them were underweight. What percent of the bags were underweight?
20. Which is the best buy? 16oz box of pasta for \$1.79 or 20 oz box for \$2.46 ?

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ANSWERS

1. 5:6 2. a) $x = 13$ $w = 16.8$ 3. 22,824.45 Gal/Day
4. 16.67 minutes. 5. 63 pigs 6. 5.76 cm
7. 200 miles 8. $CM = 9.6$ $KW = 45$
9. 3.3 m 10. 60 11. 48% 12. 45
13. 244.57% 14. 0.84%
15. 252 16. 25,000 17. \$256
18. 18,270 19. 24.44%
20. The 16 oz box is cheaper per ounce.