

Math 30 test 4 review:

- Write 15 minutes to one hour as a ratio.
- Write 75 ounces in 2 hours as a rate.
- Write 100 miles in 5 hours as a unit rate.(per)
- Comparison shopping. A 30-pound bag of fertilizer costs \$12.25, an 80-pound bag costs \$30.25, and a 10-pound bag costs \$3.60. Which is the better buy?

5. Tell whether each statement is a proportion and give a reason. a) $\frac{10}{9} = \frac{20}{18}$ b) $\frac{\frac{3}{2}}{\frac{8}{9}} = \frac{\frac{1}{4}}{\frac{4}{27}}$

6. Solve for each variable in each proportion.

a) $\frac{4}{x} = \frac{2}{8}$ b) $\frac{5-x}{17} = \frac{13}{34}$

7. A recipe for brownies calls for $1\frac{1}{2}$ cups of flour to make 15 brownies, how many cups of flour will be needed to make 130 brownies?

8. A jogger can run 1.56 miles in 7 **minutes**. At this rate, how far can the jogger run in $1\frac{3}{4}$ **hours**?

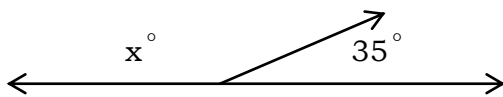
9. Perform each conversion.(unit conversion tables will be given on test)

- a) 54 inches to feet b) $2\frac{2}{3}$ feet to inches c) 80 ounces to pounds d) 3 gal to fluid ounces
 e) 2.5 hours to seconds f) 73.2 m = _____ dam g) 6789 cm = _____ dm
 h) 2 Kg = _____ cg i) 0.0068 hm = _____ cm

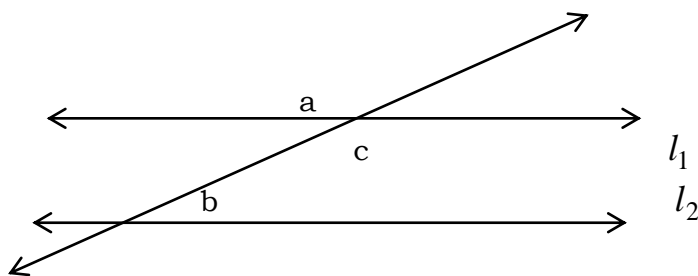
10. Which of the following are proportional to $\frac{20}{8}$

- a) $\frac{5}{2}$ b) $\frac{10}{4}$ c) 250% d) $\frac{80}{32}$ e) 0.4 f) 30 inches to 1 foot

11. Find x



12. $l_1 \parallel l_2$ $m(\angle a) = 130^\circ$. Find the measure of angle b and c.

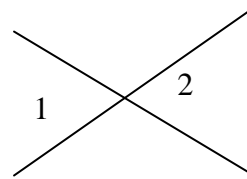


b = _____ $^\circ$

c = _____ $^\circ$

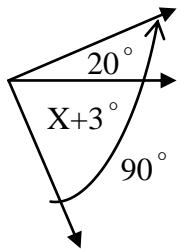
13. a) What is the complement of 40° b) What is the supplement of 40° c) What is the supplement of x ?

14. Angles 1 and 2 are called _____.
 Angle 1 and 2 are _____ in measure.

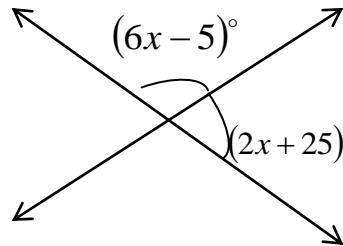


15. Find x:

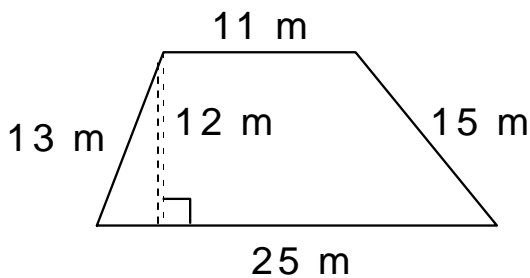
a) Find x



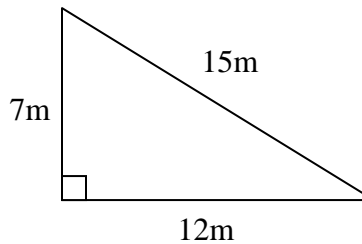
b) Find x



16. Perimeter= _____

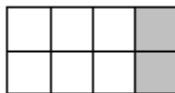


17. Area = _____ Perimeter= _____



Percents.

18. a) What fraction of the box is shaded?



b) What percentage of the box is shaded?

19. Fill in the boxes.

	decimal	fraction	percent
a)			0.50%
b)		33/20	
c)	0.21		
d)			600%

20. Of the 88 keys on a piano, 36 are black. What fraction of the keys are black? What percentage of the keys are black?

21. What does the symbol % mean? The answer is not just percent.

22. Solve each problem by **solving a percent equation**. a) 13 is what percent of 25?

b) What number is 5.6% of 4,040? c) 102% of 105 is what number? d) $66\frac{2}{3}\%$ of what number is 28?

23. One month before a stock car race, the sale of ads for the official race program was slow. Only 12 pages, or just 80% of the available pages, had been sold. **What was the total number** of pages devoted to advertising in the program?

24. A long-distance telephone company offered its customers a rebate of 20% of the cost of all long-distance calls made in the month of July. The cost of your three long distance calls were, \$3.80, \$7.50, and \$9.45. What amount will your rebate be?

25. A power plant needs to decrease there 600-person work force by 2%. How many people will be fired? What will the new work force be?

26. A car has been **discounted** 40% off of the original price. The **sale price** is now \$10,900. What was the **original** price of the car?

27. A shirt is on sale for 25% off of the original price. The original price is \$39. What is the discount and sale price?

28. If the tax rate for the previous shirt is 8.25%. What is the sales tax and total price?

