Ratios, Proportions and Similar Figure Test Review

1.) At the kennel, there are 27 dogs and 15 cats. What is the ratio of cats to dogs?

   a. 27:15   b. 5:9   c. 9:5   d. 9:16

2.) Find the ratios that form a proportion:

   a. $\dfrac{6}{12} = \dfrac{1}{3}$ b. $\dfrac{3}{2} = \dfrac{2}{3}$ c. $\dfrac{5}{9} = \dfrac{15}{27}$ d. $\dfrac{20}{5} = \dfrac{1}{4}$

3.) Find the missing value. $\dfrac{8}{20} = \dfrac{40}{x}$

   a. 100   b. 80   c. 16   d. 4

4.) If Delanie drove 340 miles in 5 hours, which proportion could be used to show how many hours would it take her to drive 612 miles?

   a. $\dfrac{340}{5} = \dfrac{x}{612}$ b. $\dfrac{340}{x} = \dfrac{612}{5}$ c. $\dfrac{5}{340} = \dfrac{x}{612}$ d. $\dfrac{5}{x} = \dfrac{612}{340}$

5.) Jennifer typed 180 words in 5 minutes. How many words did she type per minute?

   a. 90   b. 50   c. 900   d. 36

6.) Whitney wants to buy a new coat that has a regular price of $185. This weekend, the coat is on sale at a 33% discount. What is the sale price of the coat?

   a. $152   b. $61.05   c. $246.05   d. 123.95

7.) What is the total cost of an Xbox if the regular price is $390 and the sales tax is 6%?

    a. $23.40   b. $413.40   c. $366.60   d. $384

8.) 39% of the students bought yearbooks. If there were 230 yearbooks sold, how many students are there (to the nearest whole number)?
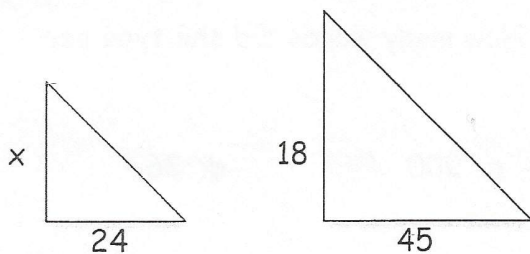
    a. 590   b. 90   c. 191   d. 269

9.) A $750 TV is on sale for 25% off. How much will you save by buying it on sale?

    a. $25   b. $562.50   c. $725   d. $187.50

10.) Kidco Furniture produces children's furniture that is similar in shape to full-sized furniture. The top of a full-sized desk measures 54 inches long by 36 inches wide. If the top of a child's desk is 24 inches wide, what is the length?

    a. 1   b. 7.5   c. 16   d. 36

11.) Find the value of x.

x | 24

18 | 45

    a. 33.75   b. 9.6   c. 52.92   d. 18