***Ratios:***

***Express each ratio in 2 different ways***:

1. 10 pencils to 18 erasers 2. 20 calculators to 15 students

***Proportions:***

***Tell whether the ratios are proportional***:

1. $\frac{8}{9}$ , $\frac{40}{45}$ 2. $\frac{4}{12}$ , $\frac{7}{20}$

***Solve for x***:

1. $\frac{3}{9}$ = $\frac{5}{x }$ 4. $\frac{2}{x}$ = $\frac{- 5}{6}$ $ $ 5. $\frac{x}{20}$ = $\frac{8}{4}$ 6. $\frac{3}{x}$ = $\frac{2}{x-6}$ 7. $\frac{x-1}{3}$ = $\frac{2x+1}{9}$

***Write a proportion for each situation below and then solve***.

8. A particular shade of paint is made by mixing 2 parts red paint and 5 parts blue paint. To make this

 shade, Corey mixed 7 quarts of red paint and 17.5 quarts of blue paint. Did he mix the correct shade?

 Explain.

9. The ratio of teachers to students at the middle school is 1:12. If there are 1080 students at the

 school, how many teachers are there?

10. Four gallons of gasoline weigh 25 pounds. How much does 15 gallons weigh?

11. On a certain day, the exchange rate was 100 U.S. dollars for 74 euros. How many U.S. dollars were

 481 euros that day?

12. The photo shop can develop 1024 photos in 8 hours. At this rate, how long will it take to develop

 160 photos?

13. Corey gets $800 paycheck every 2 weeks. At this rate, how much will he earn in 1 year (52 weeks)?

14. A newborn baby’s heart beats about 7 times every 3 seconds. At this rate, how many times does a

 baby’s heart beat in 60 seconds?