Math 1   Period: _____   Name: _____

Unit 1.5 Solving Proportions

Solve each proportion.

1) $\dfrac{3}{5} = \dfrac{x}{10}$ _____

2) $\dfrac{4}{7} = \dfrac{x}{56}$ _____

3) $\dfrac{1}{3} = \dfrac{x}{5}$ _____

4) $\dfrac{x}{5} = \dfrac{3}{10}$ _____

5) $\dfrac{7}{5} = \dfrac{x}{4}$ _____

6) $\dfrac{x}{4} = \dfrac{4}{3}$ _____

7) $\dfrac{22}{x} = \dfrac{-5}{3}$ _____

8) $\dfrac{-15}{3} = \dfrac{5}{t}$ _____

9) $\dfrac{25}{p} = \dfrac{5}{-4}$ _____

Solve each proportion using the Cross Products Property.

10) $\dfrac{14}{5} = \dfrac{9}{v}$ _____

11) $\dfrac{11}{8} = \dfrac{13}{m}$ _____

12) $\dfrac{j}{11} = \dfrac{21}{4}$ _____

13) $\dfrac{14}{f} = \dfrac{9}{21}$ _____

14) $\dfrac{-15}{9} = \dfrac{-5}{m}$ _____

15) $\dfrac{16}{-5} = \dfrac{-13}{c}$ _____

16) Explain in a few sentences how you solved proportions above (either section). In other words, what was
.   the general rule YOU used? There are several of them. I only want the one YOU used.

_____

_____

_____

17)   The doors on a building are proportional to the size of the building. The height of each door is 72 in., and the width is 32 in. If the height of the building is 102 ft, what is the width of the building?

18)   Janis is planning to bake approximately 256 cookies. If 3 pounds of cookie dough make 96 cookies, how many pounds of cookie dough should he make?

19)   Sixty students, out of 100 surveyed, chose chicken nuggets as their favorite lunch item. If the school has 1360 students, how many students would likely say that chicken nuggets is their favorite if the survey is a fair representation of the student body?

Solve the following. Round to two decimal places.

20) $\dfrac{5}{9} = \dfrac{n}{n-6}$ _____

21) $\dfrac{10}{k-5} = \dfrac{5}{k}$ _____

22) $\dfrac{6}{w-7} = \dfrac{4}{w+6}$ _____

23) $\dfrac{x-4}{x} = \dfrac{9}{8}$ _____

24) $\dfrac{p+10}{p+5} = \dfrac{6}{7}$ _____

25) $\dfrac{23}{15} = \dfrac{p+10}{p-17}$ _____