

Name: _____

Date _____

Topic : Ratio and Proportion Word Problems- Worksheet 2

1. An English book is comprised of two sections, literature and grammar, in a ratio of 3:2. How much of each type of content will be needed to make a book of 150 pages?

3 LIT : 2 GRA = 5 TOTAL
 $\frac{LIT}{TOTAL} = \frac{3}{5} = \frac{x}{150} \Rightarrow 450 = 5x \Rightarrow x = 90$
 90 LIT PAGES, 60 GRAMMER PAGES

2. 80 girls and boys have planned for a movie. They are in a ratio of 6 girls to 2 boys. How many girls are there?

6 GIRLS, 2 BOYS, 8 TOTAL
 $\frac{GIRLS}{TOTAL} = \frac{6}{8} = \frac{x}{80}$
 $480 = 8x$
 $x = 60$
 60 girls, 20 boys

3. When measuring time, 8 concerts are approximately equal to 6 symphonies. How many symphonies are equal to 28 concerts? How many concerts are equal to 42 symphonies?

8 CONCERTS, 6 SYMPHONIES
 $\frac{CONCERTS}{SYMPHONIES} = \frac{8}{6} = \frac{28}{x}$
 $8x = 168$
 $x = 21$

4. 10 burgers cost \$60. What will 15 burgers cost?

BURGERS / COST
 $\frac{10}{60} = \frac{15}{x}$
 $10x = 900$
 $x = \$90.00$

5. 2 apples cost \$20. What will 5 Apples cost?

APPLES / COST
 $\frac{2}{20} = \frac{5}{x}$
 $2x = 100$
 $x = \$50.00$

6. Mr. Jose divided his money in the ratio 5:2 between Brian and Bogie. Brian got the smaller amount of \$156. How much did Bogie receive?

5 BRIAN, 2 BOGIE
 $\frac{2}{5} = \frac{156}{BOGIE}$
 $780 = 2(BOGIE)$
 $BOGIE = \$390$

7. 6:7 = 36:42. True OR False?

$\frac{6}{7} = \frac{36}{42}$ TRUE

8. 4:3 and 25:45 are equal ratios. True OR False?

$\frac{34}{3} = \frac{15}{45}$ FALSE

9. 4:7 = 12:21. True OR False?

$\frac{3}{3} = \frac{4}{7} = \frac{12}{21}$ TRUE

10. 8 plates cost 48 dollars. How much do 20 plates cost?

PLATES / COST
 $\frac{8}{48} = \frac{20}{x}$
 $960 = 8x$
 $x = \$120$

