Proportions Mid Chapter Review Name_____

Solve the equations, write your answers in **exact form** (no decimals).

1. $\frac{p+2}{5} = \frac{2p-5}{7}$

2. $\frac{-2}{3m-4} = \frac{3}{m+2}$

3. $\frac{5t-3}{2t+7} = \frac{3}{4}$

4. $\frac{7x+1}{-2} \geq \frac{3x-1}{3}$

5. $\frac{4b+3}{2} < \frac{3b+2}{3} + \frac{5b-9}{4}$

Solve using the **proportion** $\frac{is}{of} = \frac{\%}{100}$, write your answers as indicated.

6. What number is 15% of 96? (nearest tenth)

7. 22 is what **percent** of 85? (nearest hundredth)

8. 45 is 64% of what number? (exact answer, no decimal)

Solve using the literal translation (inline equation) , write your answers as indicated.

9. What number is $17\frac{2}{7}$% of 122? (nearest tenth)

10. $67\frac{4}{9}$ is what **percent** of 137? (nearest hundredth)

11. $83\frac{3}{5}$ is 27% of what number? (nearest hundredth)

Solve using the proportion $\frac{new}{original} = \frac{\%}{100}$, *be sure to* **adjust** *your answers to reflect the* **change** *from 100%* write your answers to the **nearest tenth**

12. The price of a precious gem today $722 up from $241 in 1998. What is the percent of change?

13. The calories in a new diet candy bar are found to 62 Cal as compared to the original candy bar that measured at 250 Cal. What is the percent of change?

Solve using the literal translation (inline equation) for these percent of change problems, *be sure to* **adjust** *your answers to reflect the* **change** *from 100%* write your answers in **exact form**.

14. When a certain number is increased by 43% the result is 167. Find the original number to the nearest tenth.

15. When a certain number is decreased by 28% the result is 107. Find the original number as an exact value.

Determine the final purchase price. Round your answer to the **nearest hundredth**.

#16	Chrome Book	$899.99
	Discount	45%
	Ed Discount	5%
	Tax	$6\frac{5}{8}\%$

#17	New Phone	$659.99
	Discount	62%
	Early Bird Discount	11%
	Tax	$7\frac{3}{7}\%$