Name _____ Date _____

Ratios and Proportions

Proportions

Solve the following ratio for x.

$\frac{x}{5} = \frac{4}{10}$ → Take cross products and solve. → $5 \cdot 4 = 20$, $x \cdot 10 = 10x$

$10x = 20 \rightarrow \frac{10x}{10} = \frac{20}{10} \rightarrow x = 2$

Solve.

1. $\frac{4}{(x-3)} = \frac{28}{49}$

2. $\frac{(5+x)}{10} = \frac{2}{5}$

3. $\frac{x}{30} = \frac{7}{10}$

4. $\frac{(x-2)}{16} = \frac{x}{4}$

5. $\frac{2}{x} = \frac{6}{30}$

6. $\frac{(x+1)}{7} = \frac{6}{14}$

7. $\frac{x}{15} = \frac{5}{75}$

8. $\frac{x}{20} = \frac{2}{10}$

9. $\frac{x}{6} = \frac{(x-3)}{12}$

10. $\frac{x}{5} = \frac{12}{6}$

11. $\frac{6}{(x+5)} = \frac{18}{24}$

12. $\frac{5}{15} = \frac{x}{9}$

13. $\frac{x+x}{10} = \frac{5}{2}$

14. $\frac{x}{3} = \frac{12}{27}$