

Practice

**Integration: Algebra
Using Proportions****Solve each proportion using cross products.**

1. $\frac{3}{5} = \frac{x}{15}$

2. $\frac{20 - x}{x} = \frac{6}{4}$

3. $\frac{x + 1}{5} = \frac{x - 1}{2}$

4. $\frac{x}{x - 3} = \frac{x + 4}{x}$

5. $\frac{x + 1}{6} = \frac{x - 1}{x}$

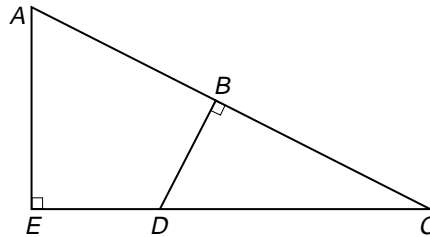
6. $\frac{1}{x} = \frac{6}{x + 9}$

7. $\frac{x}{x + 8} = \frac{2}{3}$

8. $\frac{4}{12} = \frac{x + 2}{2x + 5}$

In the figure at the right, $\frac{AC}{CD} = \frac{CE}{CB}$. Use proportions to complete the table.

	AC	BC	AB	CE	ED	DC
9.	10	4		8		
10.	12			10		9

**Use a proportion to solve each problem.**

11. The ratio of seniors to juniors in the Math Club is 2:3. If there are 21 juniors, how many seniors are in the club?
12. A 15-foot building casts a 9-foot shadow. How tall is a building that casts a 30-foot shadow at the same time?
13. A photo that is 3 inches wide and 5 inches high was enlarged so that it is 12 inches wide. How high is the enlargement?
14. Philip has been eating 2 hamburgers every 5 days. At that rate, how many hamburgers will he eat in 30 days?