

Geometry (G-SRT.2)

Unit7 Notes 2: Proportions

I can setup and solve proportions.

Name: _____

Date: _____ Period: _____

1. Solve each proportion using cross products.

a)

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

$$x = \underline{\hspace{2cm}}$$

b)

$$\frac{1}{x} = \frac{6}{x+15}$$

$$x = \underline{\hspace{2cm}}$$

c)

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

$$x = \underline{\hspace{2cm}}$$

d)

$$\frac{4}{12} = \frac{x+2}{2x+13}$$

$$x = \underline{\hspace{2cm}}$$

2. Solve the following problems. (Show work)

a) The ratio of seniors to juniors in the Chess Club is 2:3. If there are 24 juniors, how many seniors are in the club?

b) A 15 foot building casts a 9 foot shadow. How tall is the building that casts a 30 ft shadow at the same time?

3. Solve the following problems. (Show work)

a) The ratio of two supplementary angles is 4:5. Find the measures of each angle.

b) The ratio of two complementary angles is 2:3. Find the measures of each angle.

c) A 3 foot stick is broken into two pieces. The ratio of the two pieces is 5:7. How big are the two pieces?