

**Metric Relations**

\*\*\* Solve by Pythagoras Theorem first!  
First thing you should check.

Dec 4-11:18 AM

Dec 5-1:24 PM

Dec 5-1:34 PM

Dec 5-1:41 PM

**CONGRUENCY**

- SAS
- ASA
- SSS

**SIMILARITY**

- SAS (proportions)
- AA
- SSS (proportions)

$k = \frac{8}{3} = \frac{6}{3} = 2$

$\frac{6}{3} = 2$

Dec 4-11:20 AM

Jack and Gill each buy two different types of chocolates from a store. Jack buys 5 Lindt chocolates and 4 Hershey chocolates, which comes up to \$35.25. Gill buys 4 Lindt and 5 Hershey which comes up to \$28.75. How many Lindt chocolates should the store sell if they offer the customer 5 Hershey and the price comes up to \$7.75?

$$\begin{aligned} 5x + 4y &= 35.25 \\ 4x + 5y &= 28.75 \end{aligned}$$

$$\begin{aligned} 8(5x + 4y) &= 8(35.25) \\ 40x + 32y &= 282 \\ + (4x + 5y) &= 287.5 \\ -40x - 32y &= -282 \\ \hline 5y &= 5.25 \\ y &= 1.05 \end{aligned}$$

$$\begin{aligned} 5x + 4(1.05) &= 35.25 \\ 5x + 4.2 &= 35.25 \\ 5x &= 31.05 \\ x &= 6.21 \end{aligned}$$

Dec 4-11:21 AM

$$6 = 35x + 2$$

$$y = 43x - 4$$

$$35x + 2 = 43x - 4$$

Dec 5-2:00 PM

In the Cartesian plane on the right,  
 $\overline{DE} \parallel \overline{FC}$   
 $m\overline{DE} = \text{slope}$   
 the coordinates of point C are C(25,0)  
 The equation of the line passing through points B and F is  $0 = -4x - 3y + 60$   
 What is the measure of segment BD?

