

## Warmup Problem

A 20-ft board is cut into 2 pieces.

One piece is 4 feet less than twice the other piece. How long is each piece?

Let  $x$  = length of one piece (the other piece)

Let  $2x-4$  be the length of one piece

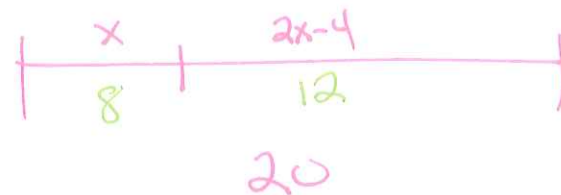
$$\underline{x} + \underline{2x-4} = 20$$

$$3x - 4 = 20$$

+4     +4

$$\frac{3x}{3} = \frac{24}{3}$$

$$x = 8 \text{ ft}$$



The pieces are 8ft  
and 12ft long.

$$20 - 8 = 12 \text{ ft}$$