

Homework:

1) $\angle ABC$ and $\angle DEF$ are congruent angles. $m\angle ABC = 3x - 20$, and $m\angle DEF = 2x + 10$. Find x and the measure of each angle.

Geometry:

Substitute:

Solve algebra:

$$x =$$

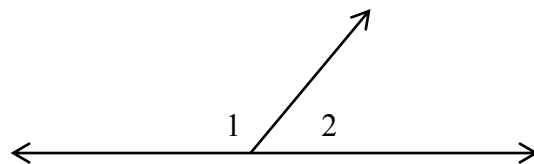
$$m\angle ABC =$$

$$m\angle DEF =$$

Check:

2) Given $m\angle 1 = 10x + 40$, $m\angle 2 = 2x + 20$ as shown in the figure. Solve for x and the measures of the two angles. Show the steps and check your result.

Geometry:



Substitute:

Solve algebra:

$$x =$$

$$m\angle 1 =$$

$$m\angle 2 =$$

Check:

3) Given $PQ = 12$ and $QR = 3x + 3$. Points P , Q , and R are collinear and Q bisects \overline{PR} . Solve, check.

Geometry:

Substitute:

Solve algebra:

$$x =$$

$$PQ =$$

$$QR =$$

Check:

The following pairs do not mean the same thing. Explain what they mean and what the difference is. Use complete sentences.

21) \overline{AB} , AB

22) $\angle ABC \cong \angle DEF$, $m\angle ABC = m\angle DEF$