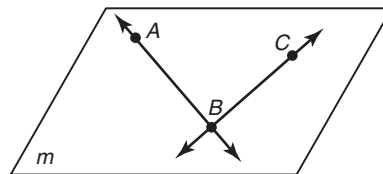**Homework: PreQuiz problems**

1. In the figure, given that $\overline{AB} \cong \overline{BC}$, $AB = x + 7$, $BC = 11$. Solve for x, AB, and BC. Show each step.

Geometry (1 pt):

Substitute (1 pt):

Solve algebra:

$x =$ (1 pt)

$AB =$ (1 pt)

$BC =$ (1 pt)

Check (1 pt):

2. Given two complementary angles, $\angle ABC$ and $\angle DEF$. If $m\angle DEF = 55°$ then solve for the measure of $\angle ABC$. Show the steps.

Geometry (1 pt):

Substitute (1 pt):

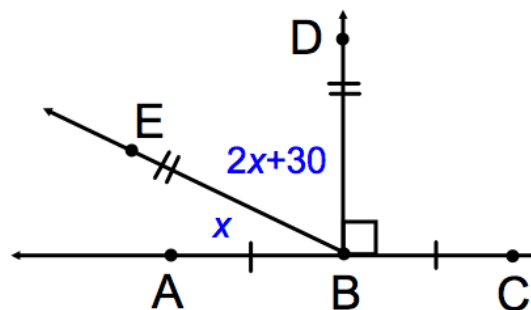Solve algebra (1 pt):

$m\angle ABC =$

Check (1 pt):

3) Given the figure, $m\angle ABE = x$ and $m\angle DBE = 2x + 30$. Solve for x and the angle measures. Show each the step.
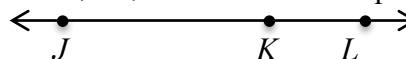
Geometry (1 pt):

Substitute (1 pt):

D

E

2x+30

x

A B C

Solve algebra:

$$x = \qquad \text{(1 pt)}$$

$$m\angle ABE = \qquad \text{(1 pt)}$$

$$m\angle DBE = \qquad \text{(1 pt)}$$

Check (1 pt):

4) Given that $JK = 5x$, $KL = x + 2$, and $JL = 20$. Find the value of x, JK, and KL. Show steps.

Geometry (1 pt):

J   K L

Substitute (1 pt):

Solve algebra:

$$x = \qquad \text{(1 pt)}$$

$$JK = \qquad \text{(1 pt)}$$

$$KL = \qquad \text{(1 pt)}$$

Check (1 pt):