

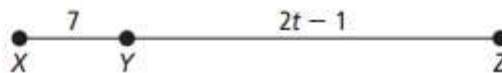
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

1)

Point  $C$  does not lie on  $\overleftrightarrow{XY}$ . Can point  $C$  lie in the same plane as  $\overleftrightarrow{XY}$ ? Explain.

2)

Look at the diagram below. If  $XY = 7$  and  $XZ = 30$ , what is the value of  $t$ ?



3)

$M$  is the midpoint of  $\overline{LN}$ . What is  $LM$ ?



4)

$m\angle RNY + m\angle GNC = 128$  and  $\angle RNY \cong \angle GNC$ . What is true about these two angles?

5)

$\angle ABC$  and  $\angle DBE$  are vertical angles,  $m\angle ABC = 3x + 20$ , and  $m\angle DBE = 4x - 10$ . Write and solve an equation to find  $m\angle ABC$  and  $m\angle DBE$ .

6)

How do you construct a perpendicular bisector of  $\overline{AB}$ ? Use three steps.

7)

The midpoint of  $\overline{AB}$  is in Quadrant IV, and  $\overline{AB}$  is parallel to the y-axis.  
What quadrant or quadrants cannot contain either point  $A$  or  $B$ ? Explain.