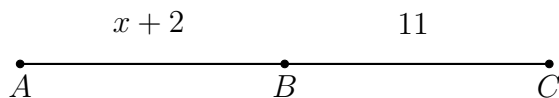


**I can work with a number line**

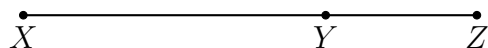
1. Do Now: Given point  $B$  is the midpoint of  $\overline{AC}$ , with  $AB = x + 2$ ,  $BC = 11$ .

First write an equation representing the situation, then find  $x$ .



2. Do Now: The points shown are in a straight line,  $\overline{XYZ}$ .

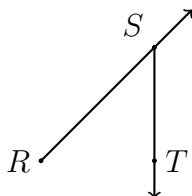
(a) Measure and label the lengths  $XY$  and  $YZ$  to the nearest centimeter.



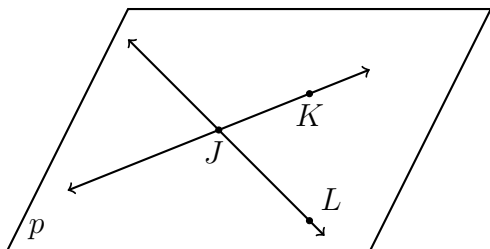
- (b) Write an equation employing the Segment Addition Postulate.  
(fill in the blanks with values in centimeters)

$$XZ = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

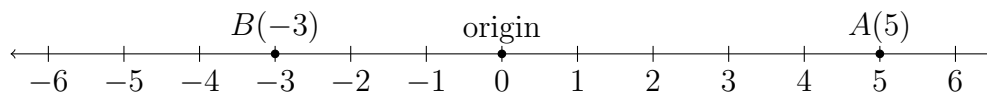
3. Do Now: Points that are all located on the same plane are \_\_\_\_\_.
4. Do Now: Write down the name of two line segments shown in the diagram below using proper geometric notation.



5. Do Now: Identify two lines in the given plane.



**Absolute value: the distance from a point to the origin (zero)**



The absolute value of 5 is 5.  $|5| = 5$

The absolute value of  $-3$  is 3.  $|-3| = 3$

6. Find the value of each expression.

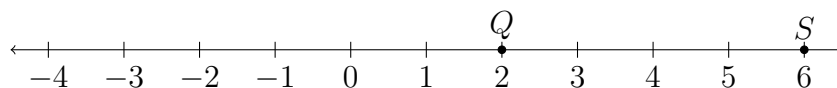
(a)  $|11| =$

(c)  $|-4.75| =$

(b)  $|-7| =$

(d)  $|10 - 7| =$

7. Given  $\overleftrightarrow{QS}$  as shown on the number line.

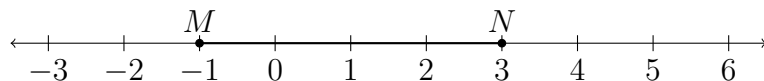


(a) In the given number line units, what is the distance between  $Q$  and  $S$ ?

$QS =$

(b) Mark the point  $R$ , the midpoint of  $\overline{QS}$ .

8. Given  $\overline{MN}$  with  $M(-1)$  and  $N(3)$ , as shown on the number line.



What is the length of the segment  $\overline{MN}$ ? Show your work as an equation.

Can a length be a negative number?