

Integers and Variables Homework

Name _____

Find the value of x to make the equation true

1) $-6 - 2 + 3 + x = 0$

$$-5 + x = 0$$

$x = 5$

3) $17 + x + 10 - (-3) + (-12) = 0$

$$x + 18 = 0$$

$x = -18$

2) $-4 - (-3) + x = 0$

$$-1 + x = 0$$

$x = 1$

4) $x + (-8) - (-2) + 7 - 2 + 1 = -7$

$$x + 0 = -7$$

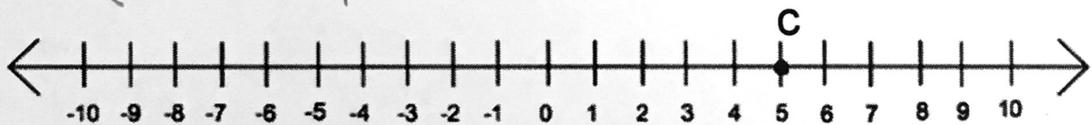
$x = -7$

5) An equation is shown, where $a < 0$ and $c > 0$.

$$a + b = c$$

Plot two points on the number line to show the locations of a and b.

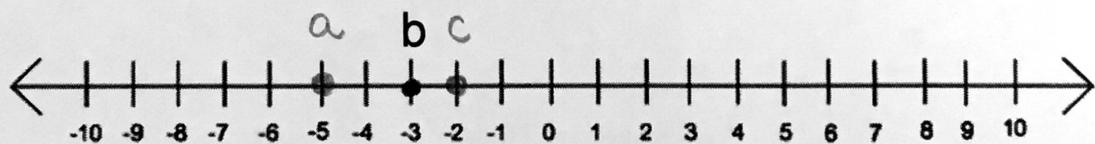
(Plot two points which add to 5)



6) An equation is shown, where $b < 0$ and $c < 0$. Example: $a - (-3) = -2$

$$a - b = c$$

Plot two points on the number line to show the locations of a and c.



7) $a - b = c$

If $a > 0$ and $b < 0$, what must be true about c?

- A. $c > 0$
- B. $c < 0$
- C. $c = 0$
- D. $c = b$

$$4 - (-2) = 6$$

8) $a - 21 = a + b$

What must be true about b?

$$b = -21$$