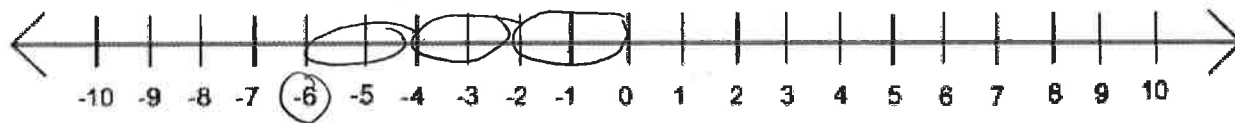
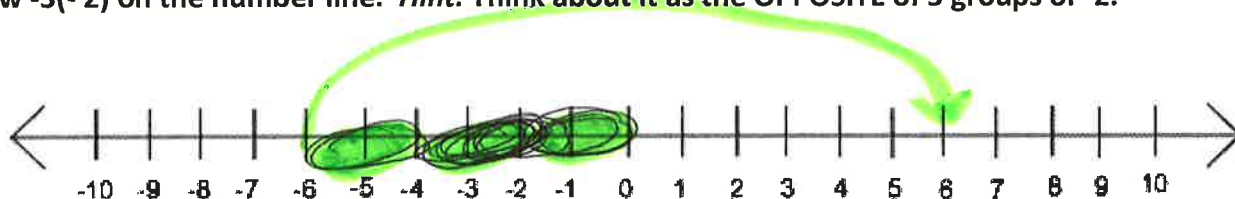


Lesson 1-8
 Multiplying Integers

Show $3(-2)$ on the number line. ← $(-2) + (-2) + (-2) = -6$



Show $-3(-2)$ on the number line. *Hint: Think about it as the OPPOSITE of 3 groups of -2.*



Patterns to Multiply Integers		
+ times +	$2 \times 5 = 10$	positive answer
- times -	$-2 \times -5 = 10$	positive answer
- times +	$-2 \times 5 = -10$	negative answer
+ times -	$2 \times -5 = -10$	negative answer
0 times + or -	$-2 \times 0 = 0$	zero

same sign
 different sign

Same Sign = POSITIVE

Different Signs = NEGATIVE

You try!

$7 \times (-2) = -14$

$-3 \times (-4) = 12$

$-5 \times 3 = -15$

Challenge: Multiply. Hint: Multiply from left to right.

$$\begin{array}{l} -4 \cdot 8(-2) = \underline{64} \\ \checkmark \\ -32(-2) \end{array}$$

$$\begin{array}{l} 6(-1)5 = \underline{-30} \\ \checkmark \\ -6 \cdot 5 \end{array}$$

$$\begin{array}{l} 70 \cdot 0 \\ \wedge \\ -7 \cdot (-10) \cdot 0 = \underline{0} \end{array}$$

$$\begin{array}{l} -4 \cdot -2(3) = \underline{24} \\ \checkmark \\ 8 \cdot 3 \end{array}$$

Dividing Integers

Patterns to Divide Integers		
+ divided by +	$10 \div 5 = 2$	positive answer
- divided by -	$-10 \div -5 = 2$	positive answer
- divided by +	$-10 \div 5 = -2$	negative answer
+ divided by -	$10 \div -5 = -2$	negative answer
+ or - divided by 0	$-2 \div 0 = 0$	zero

Same sign

different sign

Same Sign = POSITIVE

Different Signs = NEGATIVE

You try!

$$\begin{array}{l} + \quad - \\ 48 \div (-6) = \underline{-8} \end{array}$$

$$-10 \overline{) -80} = \underline{8}$$

$$\frac{-25}{5} = \underline{-5}$$

Challenge:

$$\begin{array}{l} (-15 \div 5) + (-6 + 2) = \underline{-7} \\ \checkmark \\ -3 + (-4) = -7 \end{array}$$

$$\begin{array}{l} -10 \div (-2) \cdot (-4) + 3^2 = \underline{-11} \\ \checkmark \\ 5 \cdot -4 + 9 \\ -20 + 9 \end{array}$$