Name: _____   Date: _____

Learning Goal 1.2	I can multiply and divide integers.

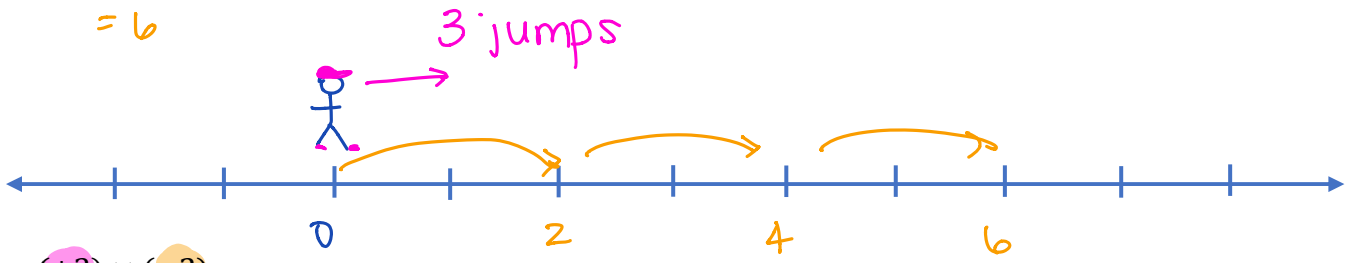Integer 1   ×   Integer 2

- +/- tells you what direction to face
- # tells you how many jumps

- +/- forwards or backwards
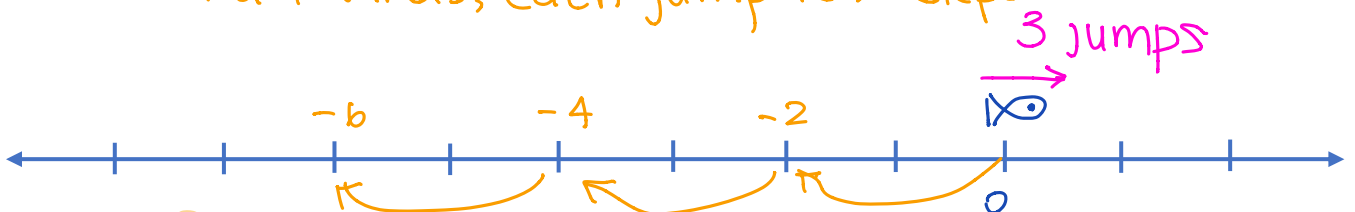- # tells you how big your jump is.

Always start at ___zero___ **on the number line.**

Example Find the following **product** by modelling the equation.

a. (+3) × (+2)   forward, each jump is 2 steps

= 6

3 jumps

b. (+3) × (−2) = −6

backwards, each jump is 2 steps

3 jumps

c. (−3) × (+2) = −6
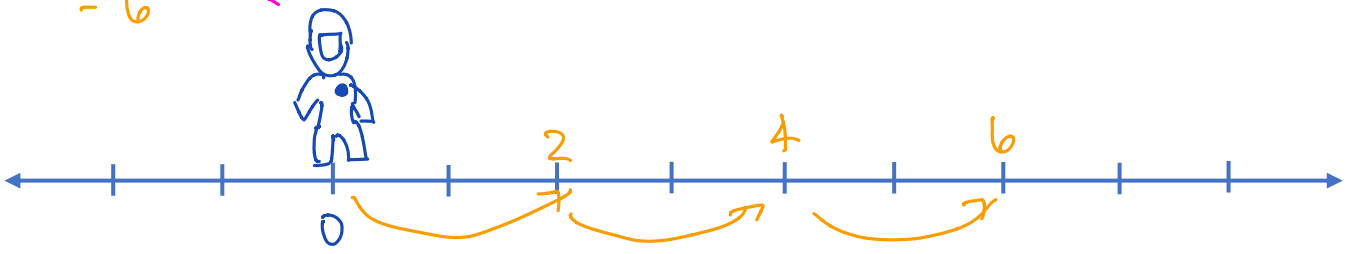
forward, each jump is 2 steps

3 jumps

d. $(-3) \times (-2)$
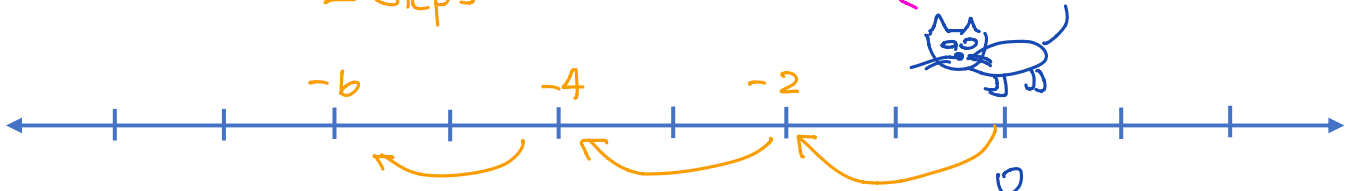
backward, 2 steps per leap

3 leaps

$= 6$

Sign Rule

- When the integers have the same sign, *you have a positive product*

- When the integers have different signs, *you have a negative product.*

Once more, models are *time consuming*   *necessary*
                        Inconsistent   *Limiting*

Example Find the following **products** without modelling**.**

a. $(-8) \times (-2) = 16$

b. $(-4) \times 9 = -36$

c. $(-9) \times 6 = -54$

d. $4 \times (-3) \times (-2) = 24$

Example Dwayne owns 325 shares of Global Tech Media. Each share decreased by 33 cents over a period of one week. If this trend continues, what will the total change in value of Dwayne's shares be in eight weeks?

1. *for one share*

~~-33×8~~

8×-33

$= -264$

2. 325×-264 ~~-264×325~~

$= -85\ 800\ ¢$

$= -\$858$

Dwayne lost $858 in 8 weeks

Assignment   p.296 #1 – 10, 12, 14, 20, 21   Quiz Next Day!