

Division of Integers

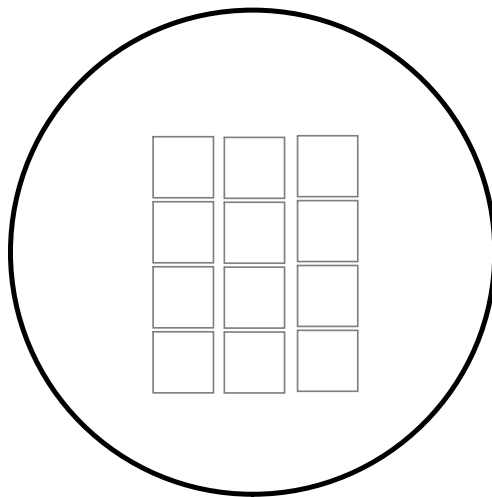
1. Bank Model
2. Number Line Method
3. Rules

Division Bank Model

$$(-12) \div (-4)$$

How many sets of (-4)
give you (-12)?

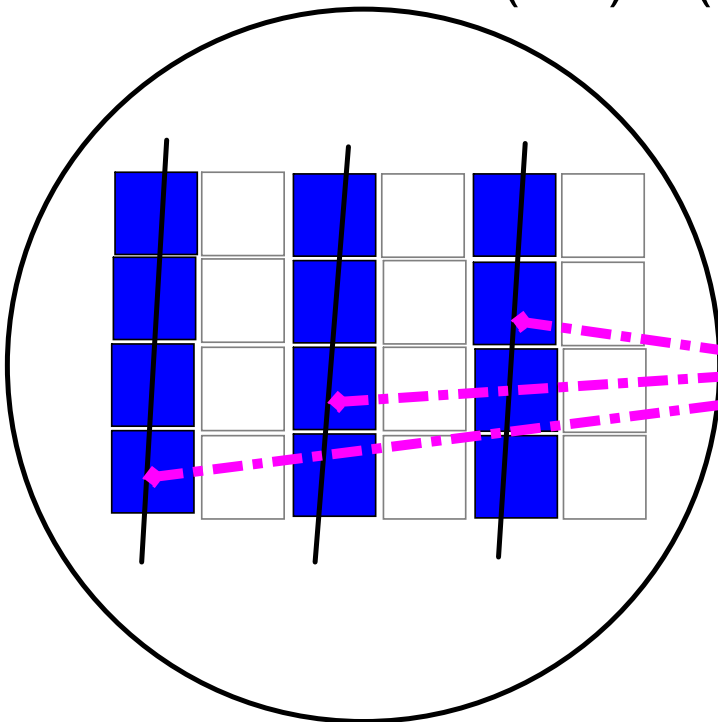
$$(?) \times (-4) = (-12)$$



3 sets of 4
white tiles

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

$$(-12) \div (+4)$$



How many sets of (+4)
give you (-12)

$$(?) \times (+4) = (-12)$$

(-3)

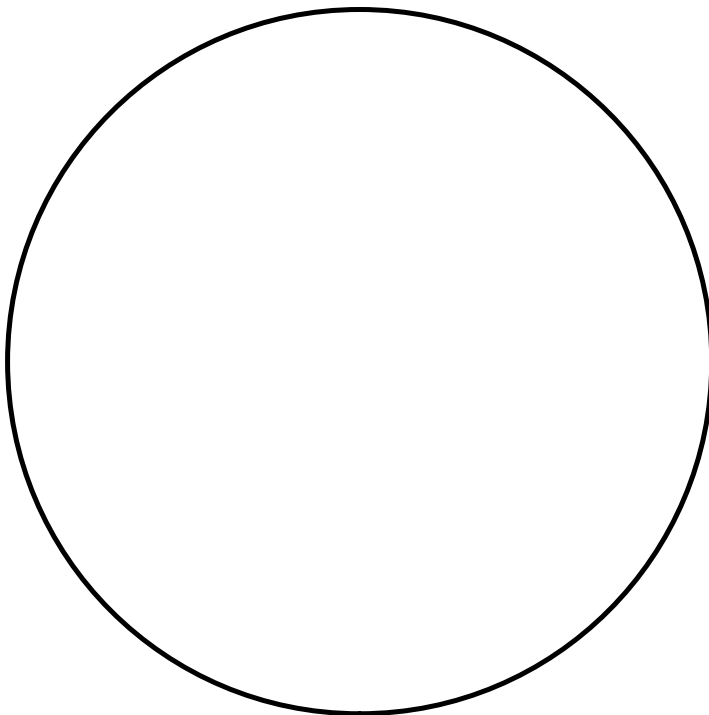
take out 3 sets

Take out 3 sets to
leave you with (-12)

$$(-12) \div (+4) = (-3)$$

Took out 3 sets

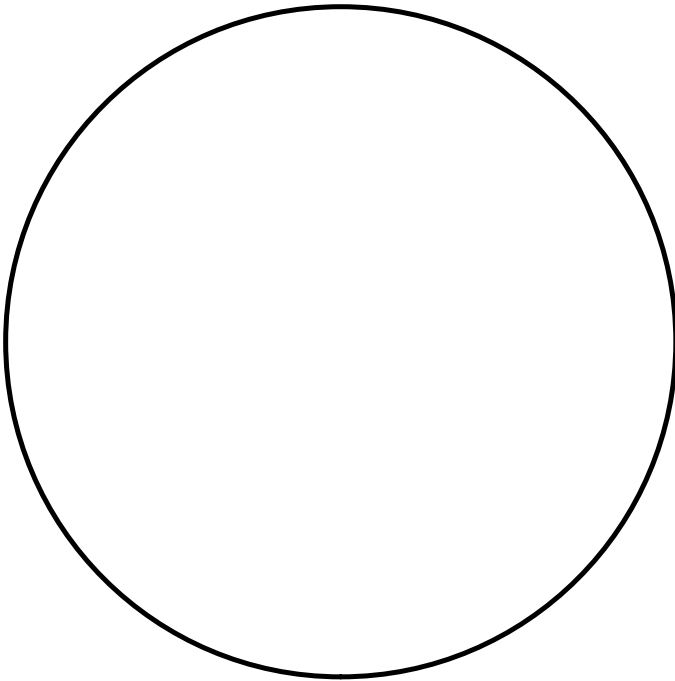
$$(+12) \div (-4)$$



How many sets of (-4)
give you (+12)?

$$(?) \times (-4) = (+12)$$

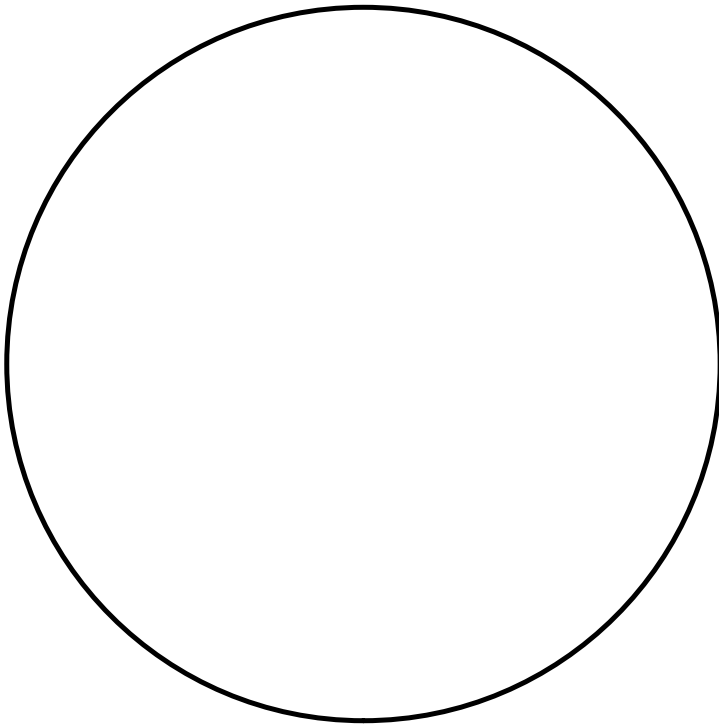
$$(+8) \div (+2)$$



How many sets of (+2)
give you (+8)?

$$(?) \times (+4) = (+12)$$

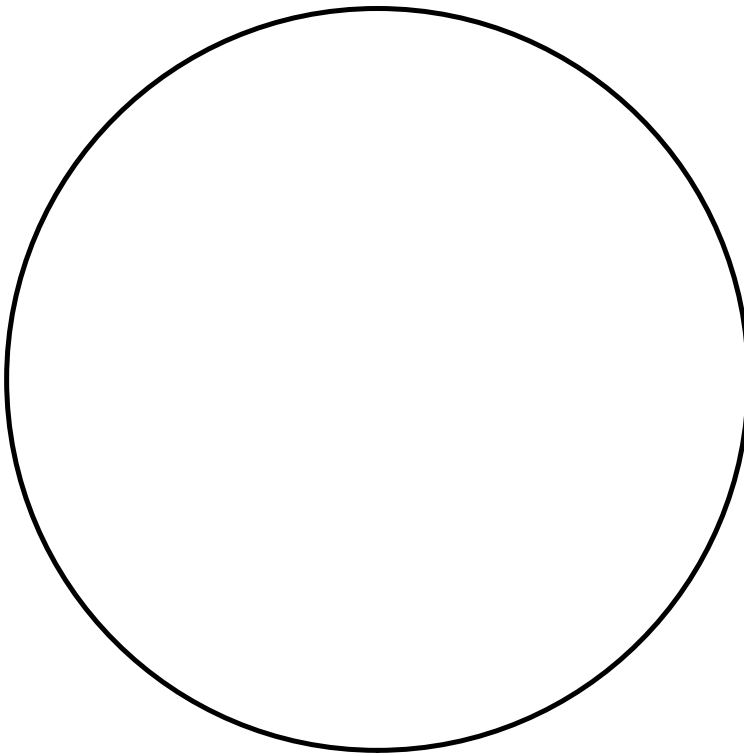
$$(-4) \div (-2)$$



How many sets of
(-2) give you (-4)?

$$(?) \times (-2) = (-4)$$

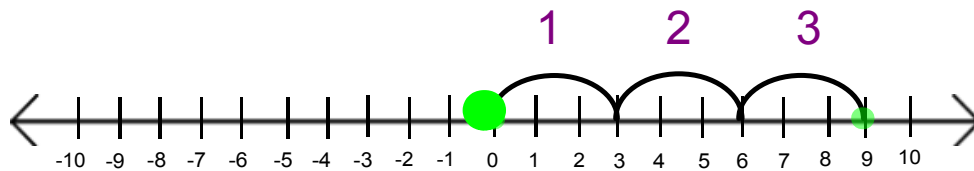
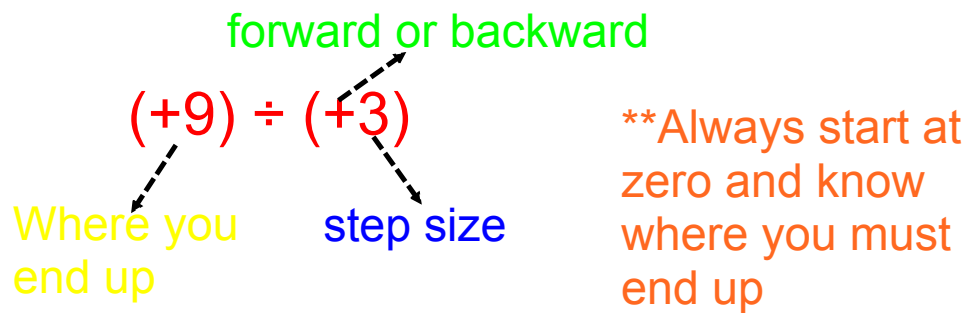
$$(-4) \div (+2)$$



How many sets of
(+2) give you (-4)?

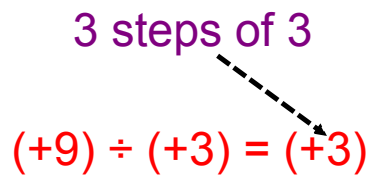
$$(?) \times (+2) = (-4)$$

Dividing Integers - Number Line Method

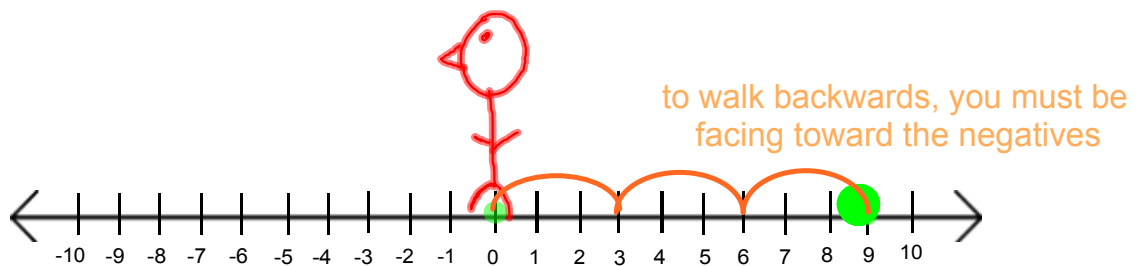


3 steps of 3

$(+9) \div (+3) = (+3)$



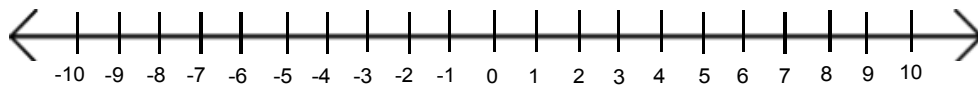
where you end up $(+9) \div (-3)$ size of steps
walk backward



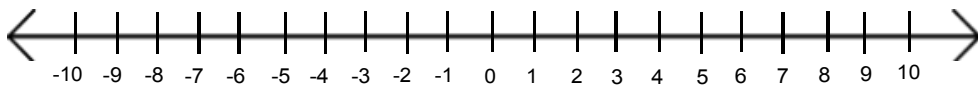
3 steps facing left

$$(+9) \div (-3) = (-3)$$

where you end up $(-9) \div (-3)$ size of steps backwards



$$(-9) \div (+3)$$



Dividing Integer Rules

$$\left. \begin{array}{l} (+) \div (+) = (+) \\ (-) \div (-) = (+) \end{array} \right) \text{Same Signs - Positive Answer}$$

$$\begin{array}{l} \text{Ex: } (+16) \div (+4) = (+4) \\ \quad \quad (-16) \div (-4) = (+4) \end{array}$$

$$\left. \begin{array}{l} (-) \div (+) = (-) \\ (+) \div (-) = (-) \end{array} \right) \text{Different Signs - Negative Answer}$$

$$\begin{array}{l} \text{Ex: } (-12) \div (+3) = (-4) \\ \quad \quad (+12) \div (-3) = (-4) \end{array}$$

Work book...pp.35, 36

Text book...pp. 80 - 82...#'s 3 - 13, 16, 18

Worksheets...37, 38

Text book...Mid Unit Review

Text book...pp. 87 - 89...#'s 4 - 13, 15, 18, 19

Quiz on Multiplication and Division

