

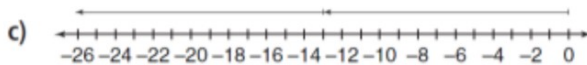
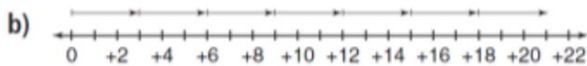
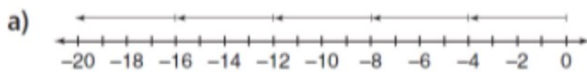
3. Write a related multiplication equation for each division equation.
- ex) $(-12) \div (+2) = (-6) \longrightarrow \begin{array}{l} (-6) \times (+2) = (-12) \\ (+2) \times (-6) = (-12) \end{array}$
- a) $(+25) \div (+5) = +5$ b) $(+24) \div (-2) = -12$ c) $(-14) \div (-7) = +2$ d) $(-18) \div (+6) = -3$

$$(\text{STOP}) \div (\text{Arrow size}) = (\# \text{ of jumps or arrows})^{\text{Always +}}$$

OR

$$(\text{STOP}) \div (\# \text{ of jumps or arrows})^{\text{Always +}} = (\text{Arrow size})$$

4. Which integer division does each number line represent? Find each quotient.



$$(\text{STOP}) \div (\# \text{ of jumps or arrows}) = (\text{Arrow size}) \quad \text{OR} \quad (\text{STOP}) \div (\text{Arrow size}) = (\# \text{ of jumps or arrows})$$

5. Enrico walked a number line to model a division. He started at 0. Enrico took steps forward of size 4. He ended up at -24 . Which division did Enrico model? How did you find out?



6. Use a number line. Find each quotient.

- a) $(+8) \div (+1)$ b) $(-6) \div (-2)$
- c) $(-16) \div (+8)$ d) $(-3) \div (-1)$
- e) $(+15) \div (-3)$ f) $(-20) \div (+2)$

Write a division statement for the following and answer

7. a) How many sets? Ex) 10 yellow grouped in sets of 2 --> $(+10) \div (+2) = (+5)$
- i) 12 yellow tiles grouped in sets of 6
 - ii) 15 red tiles grouped in sets of 3
- b) How many in each set?
- i) 8 yellow tiles shared among 2 sets
 - iii) 21 red tiles shared among 7 sets

8. Use Rules to find the Quotient (No Modeling)

- a) $(+18) \div (+6)$ b) $(-18) \div (+9)$ c) $(-16) \div (-4)$ d) $(+21) \div (-7)$ e) $(+15) \div (-5)$ f) $(-16) \div (-8)$

9. Use Rules to find the Quotient (No Modeling)

- a) $(+8) \div (+4)$ b) $(-8) \div (-4)$ c) $(+8) \div (-4)$ d) $(-8) \div (+4)$

Write a division equation for each word problem

- 11.** The temperature rose 3°C each hour for a total change of $+12^{\circ}\text{C}$. Use integers to find the number of hours the change in temperature took.
- 13.** A submarine was at the surface of the ocean. It made 4 identical plunges in a row. Its final depth was 148 m below sea level. What was the depth of each plunge? _____

Show your thinking

- 18. Take It Further** Reena deposits \$4 into her savings account each week. Today, Reena's account has a balance of \$16.
- a) How many weeks from now will Reena's account have a balance of \$40?
- b) What was the balance in Reena's account 2 weeks ago?
- Explain how you can use integers to model each situation.