

Unit 2: Integers

1. Can you **add** integers?

$$(+12) + (+23) = 35$$

$$(+12) + (-23) = -11$$

$$(-12) + (+23) = 11$$

$$(-12) + (-23) = -35$$

3. Can you **multiply** integers?

$$(+8) \times (+6) = 48$$

$$(+8) \times (-6) = -48$$

$$(-8) \times (+6) = -48$$

$$(-8) \times (-6) = 48$$

2. Can you **subtract** integers? Tip: add the opposite

$$(+12) - (+23) = -11$$

$$(+12) - (-23) = 12 + 23 = 35$$

$$(-12) - (+23) = -35$$

$$(-12) - (-23) = -12 + 23 = 11$$

4. Can you **divide** integers?

$$(+24) \div (+4) = 6$$

$$(+24) \div (-4) = -6$$

$$(-24) \div (+4) = -6$$

$$(-24) \div (-4) = 6$$

5. a) In a basic equation, when do you get a **positive integer** as an answer?

- omit -

b) In a basic equation, when do you get a **negative integer** as an answer?

- omit -

5. Define **sum**, **difference**, **product** and **quotient**.

sum: add numbers

difference: subtract numbers

product: multiply numbers

quotient: divide numbers

7. A golf tournament is nine rounds. Katie shot -1 in two rounds, -2 on one round, and +3 on another two rounds, +1 on three rounds and a +5 on one round. What was Katie's final score?

$$\underbrace{(-1) + (-1)}_{-4} + \underbrace{(-2)}_{-2} + \underbrace{3 + 3}_{6} + \underbrace{1 + 1 + 1}_{3} + 5 = \boxed{+10 \text{ final score!}}$$

8. What is **Order of Operations** and when do you use it?

**BEDMAS!** Brackets, Exponents, Divide + Multiply, Add + Subtract

→ use when you have several operations in an expression or an equation

9. Solve the following:

a)  $(-5) + (-12) \div (-3) =$

$$-5 + 4$$

$$\boxed{= -1}$$

b)  $(-3) \times (+7) \div (-2) + 5 =$

$$\underbrace{-21 \div (-2)}_{10.5} + 5$$

$$10.5 + 5$$

$$\boxed{= 15.5}$$

c)  $[7 - (-2)] \times 2 + (-12) \div (-4)$

$$(7 + 2) \times 2 + (-12) \div 4$$

$$9 \times 2 + (-12) \div 4$$

$$18 + (-3)$$

$$\boxed{= 15}$$

d)  $[(-9) - (-2)] \times 8^2 + (-15) \div (-5) - [(-3) + (-2)]$

$$\underbrace{(-9 + 2)}_{-7} \times 64 + (-15) \div (-5) - (-5)$$

$$\underbrace{-7 \times 64}_{-448} + \underbrace{(-15) \div (-5)}_{3} + 5$$

$$-448 + 3 + 5$$

$$\boxed{= -440}$$