

NON-GRADED QUIZ ON INTEGERS & ORDER OF OPERATIONS

ANSWER KEY

(1) Add:

$$(+15) + (-3) = +12$$

$$(-15) + (+3) = -12$$

$$(-15) + (-3) = -18$$

 SHOW ME

(2) Subtract:

$$(+15) - (-3)$$

$$(-15) - (+3)$$

$$(-15) - (-3)$$

Change subtract to add:

$$(+15) - (-3) \rightarrow 15 + 3 = 18$$

$$(-15) - (+3) \rightarrow (-15) + (-3) = -18$$

$$(-15) - (-3) \rightarrow (-15) + (+3) = -12$$

 SHOW ME

(3) Multiply:

$$(+15) \times (-3) = -45$$

$$(-15) \times (+3) = -45$$

$$(-15) \times (-3) = +45$$

 SHOW ME

(4) Divide:

$$(+15) \div (-3) = -5$$

$$(-15) \div (+3) = -5$$

$$(-15) \div (-3) = +5$$

 SHOW ME

(5) Evaluate:

$$3 + (-6) + (-4) + 8$$

Combine like signs:

$$3 + 8 + (-6) + (-4)$$

$$11 + (-10) = +1$$

 SHOW ME

(6) Evaluate:

$$(-2)(-5) + (-3)(6)$$

Use PEMDAS

$$M: (-2)(-5) + (-3)(6)$$

$$10 + (-18)$$

$$A: 10 + (-18) = -8$$

 SHOW ME

(7) Evaluate:

$$(-2)^2 - (3)(-4)$$

Use PEMDAS

E: $(-2)^2 - (3)(-4) = 4 - (3)(-4)$

M: $4 - (3)(-4) = 4 - (-12)$

S: $4 - (-12) = 4 + 12 = \mathbf{16}$

 SHOW ME

(8) Evaluate:

$$(-5)^2 - 3^3$$

Use PEMDAS

E: $(-5)^2 - 3^3 = 25 - 27$

S: $25 - 27 = 25 + -27 = \mathbf{-2}$

 SHOW ME

(9) Evaluate:

$$-3^2 - (-3)^2$$

Use PEMDAS

E: $-3^2 - (-3)^2 = -9 - 9$

S: $-9 - 9 = -9 + (-9) = \mathbf{-18}$

 SHOW ME

(10) Evaluate:

$$\frac{(-6)(2)}{-3}$$

Use PEMDAS

TOP: $(-6)(2) = -12$

BOTTOM: -3

$$\frac{(-6)(2)}{-3} = \frac{-12}{-3} = \mathbf{4}$$

 SHOW ME

(11) Evaluate:

$$\frac{12 \div (-3)(-2)}{2^2 + 3}$$

Use PEMDAS

TOP: $12 \div (-3)(-2) = (-4)(-2) = 8$

BOTTOM: $2^2 + 3 = 4 + 3 = 7$

$$\frac{12 \div (-3)(-2)}{2^2 + 3} = \frac{8}{7}$$

 SHOW ME

(12) Evaluate

$$\frac{5 - (-2) + 3}{4 - 4 \div (-4)}$$

Use PEMDAS

TOP: $5 - (-2) + 3 = 5 + 2 + 3 = 10$

BOTTOM: $4 - 4 \div (-4)$
 $= 4 - (-1)$
 $= 4 + 1 = 5$

$$\frac{10}{5} = 2$$

 SHOW ME