

Assessment Tuesday Dec. 13

Integers

Multiplying & Dividing

Rules: Same sign the positive

Study $\left\{ \begin{array}{l} (+) \times (+) = + \\ (-) \times (-) = + \end{array} \right.$

Opposite in signs the product is negative

$\left\{ \begin{array}{l} (+) \times (-) = (-) \\ (-) \times (+) = (-) \end{array} \right.$

$$(+36) \div (-4) = \underline{-9}$$

$$(+36) \div (+4) = \underline{+9}$$

$$(-7) \times (-3) = \underline{-21}$$

$$(-4) \times (-3) = \underline{+12}$$

BEDMAS → Order of operations

B: bracket
 E: exponents
 D: division
 M: multiplication
 A: addition
 S: subtraction

Ex) $2 + 56 \div 7 \times (-3)$

$2 + 8 \times (-3)$

$2 + -24$

-22

Ex2) What sign would the answer be?

$(-4 \times -3) \div (-2) \times (+18) \div (-4)$



$+ \div (-) \times (+) \div (-)$

$(-) \times (+) \div (-)$

$(-) \div (-)$

+

Using tiles to represent integer
Multiplication & Division

shaded		+
unshaded		-

a) $(+4) \times (+2)$

Put down 4 groups of +2 tiles



$$(+4) \times (+2) = (+8)$$

Which operation is modelled below
 zero pairs involved (neg is first)

$\begin{matrix} \bullet & + \\ \circ & - \end{matrix}$

$a) (+2) \times (-3) \quad -$
 $b) (+2) \times (+3) \quad \times$
 $c) (-2) \times (+3) \quad -$
 $d) (+3) \times (+2) \quad \times$

$= \begin{matrix} \circ \circ \circ & \circ \circ \circ \\ \bullet \bullet \bullet & \bullet \bullet \bullet \end{matrix}$
 $= \begin{matrix} \circ \circ \circ & \circ \circ \circ \\ & -6 \end{matrix}$

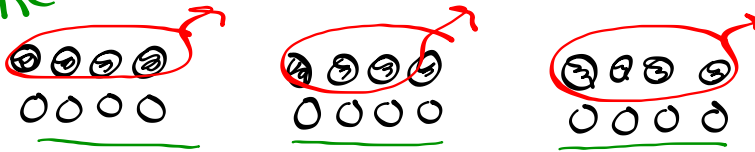
Using tiles to represent interger Multiplication & Division

Need zero pairs

shaded \ominus +
unshaded \circ -

b) $(-3) \times (+4) = -12$

Remove 3 groups of +4 tiles



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