

Warm Up

a) $-7 + 12 =$

d) $-9 - 4 =$

b) $5 - 11 =$

e) $5 - (-2) =$

c) $-6 + (-8) =$

f) $-10 - (-14) =$



Solve the following equations.

a) $x + 5 = 12$

d) $-10 + x = 16$

b) $x - 6 = 7$

e) $4 = x - (-7)$

c) $x - 5 = -2$

f) $8 + y = -3$

X

Multiplying Integers

X

Question	What it Means	Final Answer
2×4		
$3 \times (-2)$		
-2×3		
3×7		

You try!

$2 \times 3 =$

$3 \times (-1) =$

$2 \times (-5) =$

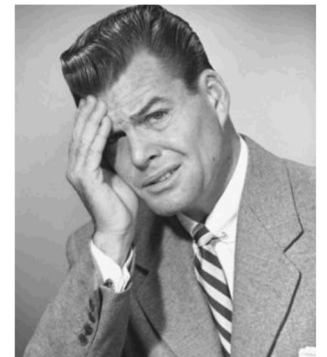
$-4 \times 3 =$

$6 \times 2 =$

$-2 \times 7 =$

A Strange Problem!

Question: What does $(-3) \times (-2)$ mean?



Some Examples

Question	What it Means	Final Answer
$(-2) \times (-4)$		
$(-3) \times (-1)$		
$-4 \times (-3)$		

A Little Investigation!



$2 \times 5 =$

$5 \times 2 =$

$5 \times (-2) =$

$2 \times (-5) =$

$-2 \times 5 =$

$-5 \times 2 =$

$(-2) \times (-5) =$

$(-5) \times (-2) =$

Investigate the results above and make a hypothesis about the following types of integer multiplication:

Positive \times Positive =

Positive \times Negative =

Negative \times Positive =

Negative \times Negative =

A Little Bit About Division

- Questions for Discussion: 1) What is division?
2) How are division and multiplication related?



Examples

Multiplication Statement	Corresponding Division Statement	Another Corresponding Division Statement
$3 \times 4 =$		
$3 \times (-4) =$		
$-3 \times (-4) =$		

Based on the examples above, make a hypothesis about the following types of integer division:

Positive \div Positive =

Positive \div Negative =

Negative \div Positive =

Negative \div Negative =

Practice

$1 \times 2 =$

$2 \times (-7) =$

$6 \div 2 =$

$-4 \times 3 =$

$-8 \div 4 =$

$(-6) \times (-3) =$

$-8 \times 2 =$

$-10 \div (-2) =$

$5 \times 6 =$

$-2 \times (-9) =$

$18 \div (-6) =$

$20 \div 5 =$