

Warmup

1.

$-6 + 1 = \underline{\hspace{2cm}}$

$4 + -6 = \underline{\hspace{2cm}}$

$-8 + -4 = \underline{\hspace{2cm}}$

$9 + 8 = \underline{\hspace{2cm}}$

2.

$9 - (-2) = \underline{\hspace{2cm}}$

$-1 - (-4) = \underline{\hspace{2cm}}$

$-7 - 8 = \underline{\hspace{2cm}}$

$3 - 6 = \underline{\hspace{2cm}}$

3.

$-6(-7) = \underline{\hspace{2cm}}$

$-5(8) = \underline{\hspace{2cm}}$

$4(-2) = \underline{\hspace{2cm}}$

$9(3) = \underline{\hspace{2cm}}$

4. Evaluate: if $a=9$, $b=6$, and $c = 8$
 $ab - 4(8 - 7) + c$

I. Dividing Integers

Division with Integers

Same Signs

Divide the numbers
Sign is **Positive**

$$\begin{array}{r} -9 \\ -3 \end{array}$$

$$\begin{array}{r} 9 \\ 3 \end{array}$$

$9 \div 3 = 3$

The signs the same
the answer is positive

$$\frac{-9}{-3} = 3$$

$9 \div 3 = 3$

The signs the same
the answer is positive

$$\frac{9}{3} = 3$$

Different Signs

Divide the numbers
Sign is **Negative**

$$\begin{array}{r} 8 \\ -2 \end{array}$$

$$\begin{array}{r} -8 \\ 2 \end{array}$$

$8 \div 2 = 4$

The signs different
the answer is negative

$$\frac{8}{-2} = -4$$

$8 \div 2 = 4$

The signs the different
the answer is negative

$$\frac{-8}{2} = -4$$

$-16 \div 8 =$

$-10 \div -2 =$

$4 \div 2 =$

$6 \div -3 =$

$-63 \div 9 =$

$81 \div -9 =$

5. $-8 \div 4 =$

6. $\frac{-12}{-3} =$

The rules for multiplication and
division are the similar:

Calculate the number, then determine the sign.

Same signs: positive answer

Different signs: negative answer

7.

II. Solve equations with Integers

$$a = -64 \div 8$$

a =

$$b = 9 (-7)$$

b =

$$c = 6 - -5$$

c =

$$d = -7 + -5$$

d =

8.

$$6 + -8 = s$$

9.

$$\frac{-20}{-10} = z$$

10.

III. Practice

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