

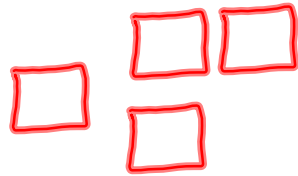
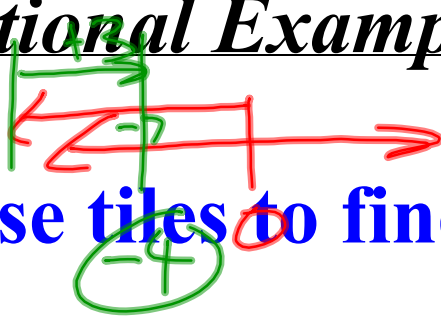
Adding Integers

Objective: To use models to add integers and to use rules to add integers.

Please read pages 24 thru 26 on your own and complete all of the Quick Check problems.

Additional Examples:

1. Use tiles to find $(-7) + 3$.



$$7 - 3 = 4$$

$$|10| = \text{distance}$$

$$10$$

$$|-2| = 2$$

$$|5| = 5$$

2. From the surface, a diver goes down 20 feet and then comes back up 4 feet. Find the diver's depth.

$$-20 + 4 = -16$$

Additional Examples:

3. Find each sum.

a. $-20 + (-15) = -35$

b. $13 + (-17) = -4$

$$\begin{array}{r} -16 \\ +13 \\ \hline \end{array}$$

4. Find $-7 + (-4) + 13 + (-5)$ -3

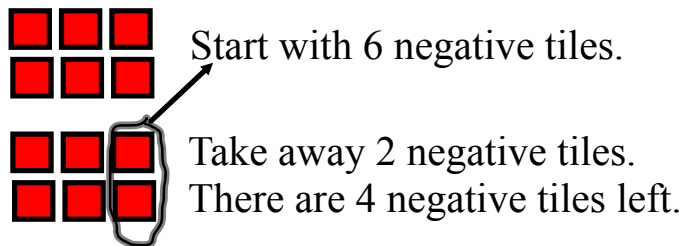
Skills You'll Need 1.6

Find each sum.

1. $8 + (-9)$ 2. $-11 + (-18)$ 3. $-4 + (-6)$
 4. $14 + (-3)$ 5. $6 + (-6)$ 6. $-13 + (-10)$

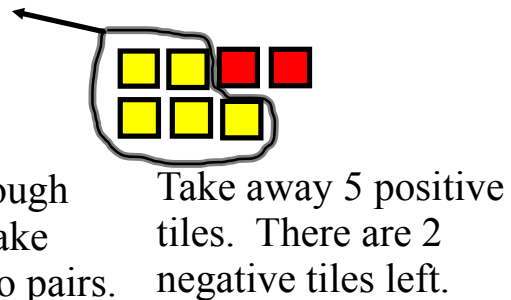
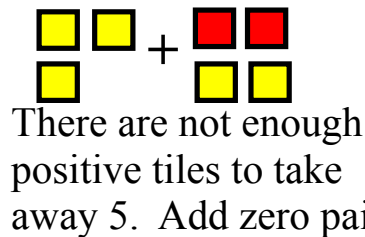
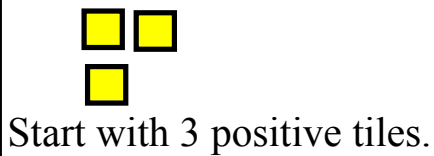
1 Example

Find $-6 - (-2)$.



2 Example

Find $3 - 5$.



Additional Examples:

1. Find $-7 - (-5)$.

$$-7 + 5 = -2$$

2. Find $2 - 8$.

$$2 + (-8) = -6$$

3. An airplane left Houston, Texas, where the temperature was 42 degrees. When the airplane landed in Anchorage, Alaska, the temperature was 50 degrees lower. What was the temperature?

Skills You'll Need 1.9 Mult and Dividing Integers

Simplify each expression.

1. $5 \cdot 4$

2. $3 \cdot 8$

3. $5 \cdot 5$

4. $14 \cdot 2$

5. $6 \cdot 5$

6. $20 \cdot 7$

Key Concepts: Multiplying Integers

- The product of two integers with the same sign is positive.
- The product of two integers with different signs is negative.
- The product of zero and any integer is zero.

Key Concepts: Dividing Integers

- The quotient of two integers with the same sign is positive.
- The quotient of two integers with different signs is negative.
- The quotient of zero and any integer is zero.

Practice for Multiplying and Dividing Integers

Simplify each product or quotient:

1. $4(-9)$

-36

2. $8 \cdot 3(-4)$

-96

3. $-72 \div 12$

-6

4. $-200 \div -25$

8

1 Simplify:

$$15 + (-22) =$$

2 Simplify:

$$-20 + (-89) + 30 + 10 =$$

3 Simplify:

$$-24 - (-5) =$$

4 Simplify:

$$-7(-3) =$$

5 Simplify:

$$-12 \times 2 =$$

6 Simplify:

$$-6(-2)(-1)(-2) =$$

Assignment:

Page 27: #'s 1-25 odds, Page 32: #'s 1-31 odds, Page 47: #'s 2-32 evens.