

**1.0**

**ADDING &  
SUBTRACTING  
POSITIVE AND  
NEGATIVE NUMBERS**

# **DO NOW**

**Simplify**

1)  $0.43 + 1.27$

# **DO NOW**

**Simplify**

$$2) \quad 4\frac{5}{6} + 2\frac{2}{3}$$

# Adding Integers without a number line

$$-3 + -5 =$$

$$-1 + -3 =$$

$$-6 + -2 =$$

$$-9 + -14 =$$

$$-12 + -8 =$$

## SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

# Adding Integers without a number line

$$-3 + 5 =$$

$$-1 + 6 =$$

$$-5 + 9 =$$

$$5 + -7 =$$

$$8 + -6 =$$

$$14 + -18 =$$

## DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that “looks” the biggest

# **Example 1**

Find the sum of the following:

$$a) -5.3 + (-4.9)$$

$$b) -12.2 + 19.3$$

# **Practice**

Find the sum of the following:

1)  $-12.6 + 7.3$

2)  $-8.4 + (-0.7)$

# **Practice**

Find the sum of the following:

$$3) \quad -9 + (-3.4)$$

$$4) \quad 0.25 + (-5.9)$$



# **Practice**

Find the sum of the following:

$$5) \quad -8 + (-4.6) + 19.5$$

# Examples

Find the sum of the following:

## SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

$$a) \quad -3\frac{1}{2} + \left(-5\frac{2}{3}\right)$$

# Examples

Find the sum of the following:

$$b) \quad 3\frac{2}{3} + \left(-5\frac{3}{8}\right)$$

## DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that “looks” the biggest

# Examples

Find the sum of the following:

$$c) \quad -12\frac{3}{5} + 8\frac{1}{6}$$

## DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

# **Subtraction is the same as adding the opposite**

- 1. Change the minus sign to addition**
- 2. Change the second number into the opposite**
- 3. Do the problem like a regular addition problem**

$$5 - 7$$

$$3 - (-7)$$

$$-3 - 6$$

$$-5 - (-9)$$

# Examples

Simplify the following:

$$a) -7 - (-5)$$

$$b) -2 - 6$$

$$c) 64 - (-13)$$

$$d) 17 - 29$$

# Examples

Simplify the following:

$$e) -24 + (-33) - 76$$

$$f) 46 - (-81) - 58$$

# Examples

**Simplify the following:**

$$g) -3.59 - (-50) =$$

$$h) 18.2 - 56.7 =$$



# Examples

Simplify the following:

*i)*  $7.7 - 16.3$

*k)*  $-20.3 - (-14.2) =$

# Examples

**Simplify the following:**

$$l) \frac{7}{3} - \frac{11}{3}$$

$$m) -\frac{4}{9} - \frac{5}{12}$$

## **Example 2**

**Simplify the following:**

$$n) -3\frac{2}{3} - 5\frac{3}{4} =$$

$$o) -2\frac{3}{8} - \left(-7\frac{1}{4}\right) =$$