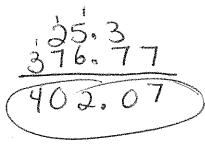
# **Lesson 9: Sums and Differences of Decimals**

### Classwork

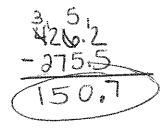
# Example 1

$$25\frac{3}{10} + 376\frac{77}{100}$$



## Example 2

$$426\frac{1}{5} - 275\frac{1}{2}$$



#### **Exercises**

Calculate each sum or difference.

1. Samantha and her friends are going on a road trip that is  $245\frac{7}{50}$  miles long. They have already driven  $128\frac{53}{100}$  How much farther do they have to drive?

$$345\frac{7}{50} - 128\frac{53}{100}$$
  
estimate  $345-129=116$   
 $-128.53$   
 $-16.61$ 

2. Ben needs to replace two sides of his fence. One side is  $367 \frac{9}{100}$  meters long, and the other is  $329 \frac{3}{10}$  meters long. How much fence does Ben need to buy?

3. Mike wants to paint his new office with two different colors. If he needs  $4\frac{4}{5}$  gallons of red paint and  $3\frac{1}{10}$  gallons of brown paint, how much paint does he need in total?

$$4\frac{4}{5} + 3\frac{1}{10} = \frac{4.8}{7.9} = \frac{7.9 \text{ gallons}}{7.9}$$

4. After Arianna completed some work, she figured she still had  $78\frac{21}{100}$  pictures to paint. If she completed another  $34\frac{23}{25}$  pictures, how many pictures does Arianna still have to paint?

$$\begin{array}{r}
 78 \stackrel{?}{=} & 34 \stackrel{?}{=} \\
 78 \stackrel{?}{=} & 78 \\
 78 \stackrel{?}{=} & 35 \\
 \hline
 78 \stackrel{?}{=} & 35 \\$$

Use a calculator to convert the fractions into decimals before calculating the sum or difference.

75. Rahzel wants to determine how much gasoline he and his wife use in a month. He calculated that he used  $78\frac{1}{3}$  gallons of gas last month. Rahzel's wife used  $41\frac{3}{8}$  gallons of gas last month. How much total gas did Rahzel and his wife use last month? Round your answer to the pearest hundredth.

$$78/3 + 41^3/8$$
 $78/3 + 41.375$ 
 $78.333$ 
 $+41.375$ 
 $119.708$ 
 $2119.71$ 

## Problem Set

1. Find each sum or difference.

a. 
$$381\frac{1}{10} - 214\frac{43}{100}$$

b. 
$$32\frac{3}{4} - 12\frac{1}{2}$$

c. 
$$517\frac{37}{50} + 312\frac{3}{100}$$

d. 
$$632\frac{16}{25} + 32\frac{3}{10}$$

e. 
$$421\frac{3}{50} - 212\frac{9}{10}$$

2. Use a calculator to find each sum or difference. Round your answer to the nearest hundredth.



a. 
$$422\frac{3}{7} - 367\frac{5}{9}$$

b. 
$$23\frac{1}{5} + 45\frac{7}{8}$$

a) 
$$\frac{1}{10} = .100.10$$

b) 
$$\frac{3}{4} = \frac{75}{100} = .75$$
 c)  $\frac{37}{50} = \frac{74}{100} = .74$   
 $\frac{1}{3} = \frac{5}{10} = .5 \text{ a.50}$   $\frac{3}{100} = .03$ 

c) 
$$\frac{37}{50} = \frac{74}{100} = .74$$
  
 $\frac{3}{100} = .03$ 

d) 
$$\frac{16}{25} = \frac{64}{100} = .64$$
  
 $\frac{3}{10} = .300.30$ 

e) 
$$\frac{3}{50} = \frac{6}{100} = .06$$