Assignment

Write

Explain in your own words how adding and subtracting positive and negative numbers with fractions and decimals is different from and similar to adding and subtracting with whole numbers.

Remember

The opposite of a number is called the additive inverse of the number. The absolute value of the difference between two numbers is a measure of the distance between the numbers.

Practice

Consider the subtraction expression $-1.3 - (-2.4)$.

1. Use a number line to solve the problem.
2. Use a two-color counter model to solve the problem.

Calculate each sum. Be sure to estimate first.

3. $12\frac{2}{5} + \left(-3\frac{1}{4}\right)$
4. $5.3 + (-7.45)$
5. $-\frac{5}{8} + 8\frac{3}{8}$

Calculate each difference. Estimate before calculating.

6. $-8.38 - 11.29$
7. $7\frac{2}{3} - \left(-4\frac{1}{4}\right)$
8. $-4\frac{5}{6} - 6\frac{2}{3}$

Stretch

Determine each solution. Let $-3 = x$, $-5 = y$, and $-4 = k$.

1. $|x - y - y - k + y + x|$
2. $k - y - k + x + k$
3. $-k - y + x - y$

Review

1. Determine each difference. Then, write a sentence that describes the movement on the number line that you could use to solve the problem.
   a. $7 - (-6)$
   b. $-5 - 13$
2. Shilo is riding her bicycle across the state of Georgia to raise money for her favorite charity. The distance in miles that she can travel varies directly with the length of time in hours she spends riding. Assume that her constant of proportionality is 18. What does the constant of proportionality represent in this problem?
3. The constant of proportionality between the number of children on a field trip and the number of teachers on the trip is $\frac{14}{3}$. There are 70 children on a field trip. How many teachers are on the trip?
4. Determine two unit rates for each given rate.
   a. 12 students ate 4.5 pizzas.
   b. Shae painted $\frac{1}{3}$ of the wall in $\frac{1}{4}$ hour.