

## Lesson 14 Summary

We can apply the rules for arithmetic with rational numbers to solve problems.

In general:

$$a - b = a + (-b)$$

If  $a - b = x$ , then  $x + b = a$ . We can add  $-b$  to both sides of this second equation to get that  $x = a + (-b)$

Remember: the *distance* between two numbers is independent of the order, but the *difference* depends on the order.

And when multiplying or dividing:

- The sign of a positive number multiplied or divided by a negative number is always negative.
- The sign of a negative number multiplied or divided by a positive number is always negative.
- The sign of a negative number multiplied or divided by a negative number is always positive.