Lesson 1: Opposite Quantities Combine to Make Zero

Problem Set

For Problems 1 and 2, refer to the Integer Game.

1. You have two cards with a sum of $(-12)$ in your hand.
	1. What two cards could you have?
	2. You add two more cards to your hand, but the total sum of the cards remains the same, $(-12)$. Give some different examples of two cards you could choose.
2. Choose one card value and its additive inverse. Choose from the list below to write a real-world story problem that would model their sum.
	1. Elevation: above and below sea level
	2. Money: credits and debits, deposits and withdrawals
	3. Temperature: above and below $0$ degrees
	4. Football: loss and gain of yards
3. On the number line below, the numbers *h* and *k* are the same distance from $0$. Write an equation to express the value of $h+k$. Explain.

$$h$$

$$k$$

$$0$$

1. During a football game, Kevin gained five yards on the first play. Then he lost seven yards on the second play. How many yards does Kevin need on the next play to get the team back to where they were when they started? Show your work.
2. Write an addition number sentence that corresponds to the arrows below.

