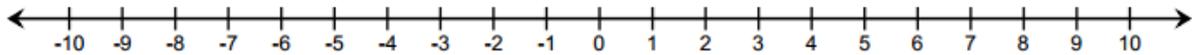


Lesson 2: Using the Number Line to Model the Addition of Integers

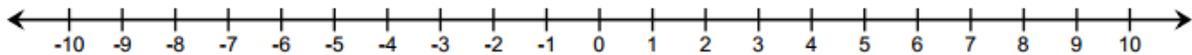
Problem Set

Represent Problems 1–3 using both a number line diagram and an equation.

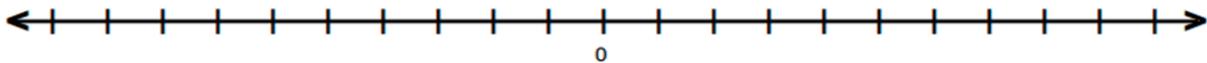
- David and Victoria are playing the Integer Card Game. David drew three cards, -6 , 12 , and -4 . What is the sum of the cards in his hand? Model your answer on the number line below.



- In the Integer Card Game, you drew the cards, 2 , 8 , and -11 . Your partner gave you a 7 from his hand.
 - What is your total? Model your answer on the number line below.

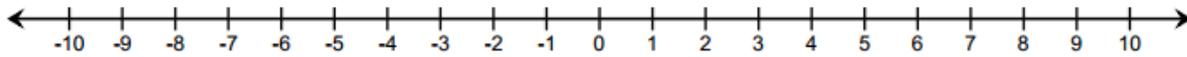


- What card(s) would you need to get your score back to zero? Explain. Use and explain the term *additive inverse* in your answer.
- If a football player gains 40 yards on a play, but on the next play, he loses 10 yards, what would his total yards be for the game if he ran for another 60 yards? What did you count by to label the units on your number line?



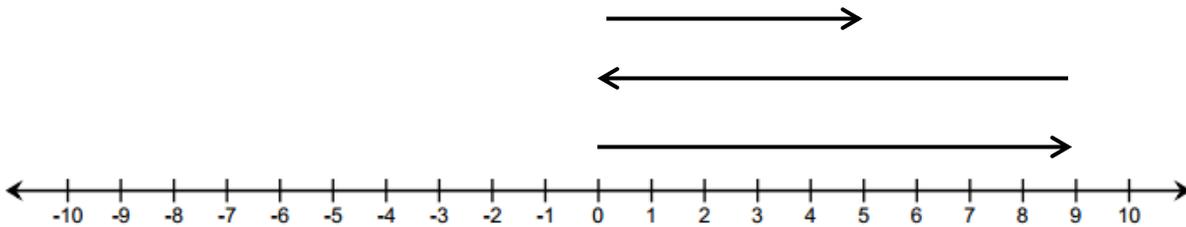
- Find the sums.
 - $-2 + 9$
 - $-8 + -8$
 - $-4 + (-6) + 10$
 - $5 + 7 + (-11)$

5. Mark an integer between 1 and 5 on a number line, and label it point Z . Then, locate and label each of the following points by finding the sums.



- a. Point A : $Z + 5$
- b. Point B : $Z + (-3)$
- c. Point C : $(-4) + (-2) + Z$
- d. Point D : $-3 + Z + 1$

6. Write a story problem that would model the sum of the arrows in the number diagram below.



7. Do the arrows correctly represent the equation $4 + (-7) + 5 = 2$? If not, draw a correct model below.

