

**Lesson Summary**

- Add integers with the same sign by adding the absolute values and using the common sign.
- Steps to adding integers with opposite signs:
  1. Find the absolute values of the integers.
  2. Subtract the absolute values.
  3. The answer will take the sign of the integer that has the greater absolute value.
- To add rational numbers, follow the same rules used to add integers.

**Problem Set**

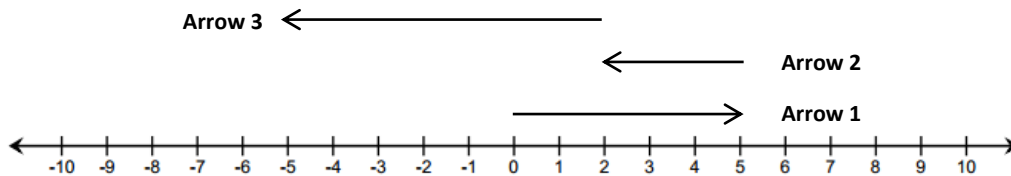
1. Find the sum. Show your work to justify your answer.
  - a.  $4 + 17$
  - b.  $-6 + (-12)$
  - c.  $2.2 + (-3.7)$
  - d.  $-3 + (-5) + 8$
  - e.  $\frac{1}{3} + \left(-2\frac{1}{4}\right)$
2. Which of these story problems describes the sum  $19 + (-12)$ ? Check all that apply. Show your work to justify your answer.

\_\_\_\_\_ Jared's dad paid him \$19 for raking the leaves from the yard on Wednesday. Jared spent \$12 at the movie theater on Friday. How much money does Jared have left?

\_\_\_\_\_ Jared owed his brother \$19 for raking the leaves while Jared was sick. Jared's dad gave him \$12 for doing his chores for the week. How much money does Jared have now?

\_\_\_\_\_ Jared's grandmother gave him \$19 for his birthday. He bought \$8 worth of candy and spent another \$4 on a new comic book. How much money does Jared have left over?

3. Use the diagram below to complete each part.



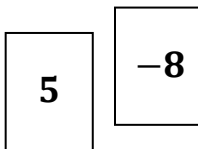
- Label each arrow with the number the arrow represents.
- How long is each arrow? What direction does each arrow point?

Arrow	Length	Direction
1		
2		
3		

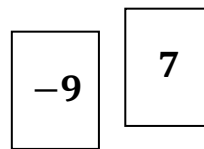
- Write an equation that represents the sum of the numbers. Find the sum.

4. Jennifer and Katie were playing the Integer Game in class. Their hands are represented below.

Jennifer's Hand



Katie's Hand



- What is the value of each of their hands? Show your work to support your answer.
- If Jennifer drew two more cards, is it possible for the value of her hand not to change? Explain why or why not.
- If Katie wanted to win the game by getting a score of 0, what card would she need? Explain.
- If Jennifer drew  $-1$  and  $-2$ , what would be her new score? Show your work to support your answer.