Objective: Students will apply operations with integers to solve word problems

Do Now: Evaluate each of the following

1) 5 - 18 =_____

2) -4 + 12 =_____

3) 2 x -9 =_____

4) -36 ÷ -18 =_____

5) 15 + -9 =_____

6) 8 - (-9) =_____

Word Problems:
Write an addition problem represented by the following number lines:

1) __________________________________________

2) __________________________________________
3) A football team loses 4 yards on 3 consecutive plays. What is the change in yardage after those four plays?

4) The temperature dropped 13°F in 7 hours. The final temperature was -2°F. What was the starting temperature?

5) At 11,560 feet above sea level, Clinton, CO is the highest town in the United States. The lowest town in Calipatria, California at 185 below sea level.
   a) Express both of these distances as integers
      Clinton:______    Calipatria:______
   b) Which town is closer to sea level? Use math vocabulary to explain how you know.

6) Matt is playing a game. He gains 7 points, loses 10 points, gains 2 points, and then loses 8 points. What is his final score?

7) You have $220 in your savings account. You take $35 from your account each week for four weeks. How much is left in your account at the end of four weeks?
8) The temperature changed from 7°F at 6 p.m. to -5°F at midnight.
   a) What was the difference between the high and low temperature?
   
b) What was the average change in temperature per hour?

9) The lowest point in the point in the Atlantic Ocean is about -8,600 meters. The lowest point in the Pacific Ocean is about 2,400 meters lower than that. What is the depth of the lowest point in the Pacific Ocean?

10) Jimmy pays for a LIRR weekly pass. His account changes by -$15 each week. How many weeks did he buy a pass if his account changed a total of -$240.

11) Which of the following has the greatest value?
   a) 5 - (-2)  b) -9 - 11  c) -9(11)  d) -300 ÷ -30

12) If a = -2 and b = -6 find the following:
    
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\begin{align*}
a + b & = -12 \\
\frac{-12}{b} & = \text{Undefined (b = 0)}
\end{align*}
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