**Unit 1 Review Sheet**  Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Simplify the following expressions

1. – 6(12x + 4) – 5x + 5
2. 4 + 9y² - 4(11y² +3)
3. 3m – 5(m + 15) for m = -3

**Write 2 math sentences for each number line model.**



4)



5)

6)

7)

**Compare the following numbers using >, <, =**

1. **a)** - 17 \_\_\_ 4 **b)** - 12 \_\_\_ - 33 **c)**$ \left|-13\right|$ \_\_\_ $ - \left|13\right|$ **d)** $ \left|-4\right|$ \_\_\_ $ \left|15\right|$

**Write the numbers in order from** **least to greatest**.

1. - 25, 33, -16, 0, -4,$ \left|-5\right|$,$ \left|23\right|$ 10) −$\left|5\right|$, 15, -21, -10, 7, $\left|-8\right|$, −$\left|-9\right|$

**Simplify: Show all work**

1. $\left|-2-6\right|$ = \_\_\_\_\_\_\_\_\_\_\_\_



1. – 15 + 8 – 21 = \_\_\_\_\_\_\_\_\_
2. – 12 – 7 + 15 = \_\_\_\_\_\_\_\_\_\_
3. $\left|-6\right| $ +$ \left|-7\right|$ – 10 = \_\_\_\_\_\_\_\_
4. $- \left|5\right| $ +$ \left|-8\right|$ – 15 = \_\_\_\_\_\_\_\_
5. – 13 • 3
6. 72 ÷ (- 8)
7. – 12 • 4 ÷ (- 8)
8. – 5 • (- 3) • ( - 10)
9. Write the number sentence for the chip model.

Key: = +1 = -1

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The temperature at 9:00 pm was 10 degrees. At 5:00 am the temperature was – 3 degrees. What was the difference in the temperature?
2. The football team’s last drive consisted of a gain of 12 yards, loss of 5 yards, gain of 9 yards, and a loss of 3 yards. After the four plays had they gained or lost yards? How many?
3. Which statements are true about **C** and **D** on the number line?

**C**

**D**

**C x D = 0, C + D > 0 , C - D< 0, C + D =0**

1. Ana is a lifeguard at the local pool. She deposited her pay check of $125 in her account. The next day she purchased a new suit for work $35. She also needed a new towel $18, and a pair of sunglasses $75. After the purchases what is the change in her account.

25) You and your friend are scuba diving. Your friend dives 40 feet below sea level and you dive 25 feet below sea level. What is the difference in your depths?

**Write an integer to represent the following situations**

1. 15 degrees below zero
2. Mt. Mitchell at 6,684 above sea level
3. Profit of $49
4. Deposit of $75
5. ATM Debt of $25
6. Withdrawal of $60
7. The opposite of 15
8. Debt of $400