

Rules for Subtracting Integers ( Additive Inverse aka Keep, Change, Change)

1. Keep the first integer
2. Change the subtraction sign to an addition sign
3. Change the integer after the subtraction sign, now an addition sign to its opposite
4. Follow the addition rules for adding with the same sign or different signs

Example:  $-4 - 6$

$-4 + 6$                       Change the subtraction sign to an addition sign

$-4 + (-6)$                       Change 6 to its opposite, -6

$4 + 6$       Since the integers have the same sign, add their absolute values

$-10$                       The answer is -10 because both integers have the same sign

**Find each difference.**

1.  $3 - (-3)$

2.  $-5 - 4$

3.  $-2 - 7$

4.  $5 - (-5)$

5.  $-3 - (-4)$

6.  $-3 - (-4)$

7.  $8 - (-4)$

8.  $-12 - 33$

9.  $42 - (-14)$

10.  $-39 - (-45)$

11.  $-60 - (-120)$

12.  $85 - (-30)$

13.  $-18 - 3$

14.  $22 - 17$

15.  $52 - 82$

16.  $-75 - (-75)$

17. If it is  $5^{\circ}$  outside and the temperature will drop  $17^{\circ}$  in the next six hours, how cold will it get?

$^{\circ}$

18. Josie has \$47 left on her checking account. If she writes a check for \$55, what will Josie's balance be?

\$

19. The elevation of Mt. Everest is 29,028 feet. The elevation of the Dead Sea is  $-485$  feet. What is the difference in the elevation between Mt. Everest and the Dead Sea?

feet

20. What is the balance as a result of having a credit of \$84 and a debit of \$29?

\$