Objectives: I can solve problems by adding & subtracting integers.

Adding & Subtracting Integers

Don't forget how to add integers now that we know how to subtract!

Rules for adding integers:

If the signs are the same: _____Add, Keep the sign_____

$2 + 5 = 7$ $-1 + -3 = ^-4$

If the signs are different: _____Subtract, use the sign of larger ab. value_____

$-3 + 6 = 3$ $-8 + 2 = -6$ $5 + -6 = -1$ $7 + -2 = 5$

Rule for subtracting integers:

Change to Adding the opposite of the next #.

$| |$ absolute Value

Practice

Solve.

No change

1. $-6 + (+2)$ __-4__

2. $5 + -3$ __2__

3. $3 + -5$ __-2__

4. $-2 + -3$ __-5__

5. $5 + (+1)$ __6__

6. $-1 + 1$ __0__

$-228 + 228$

7. $3 + -10$ __-7__

8. $-20 + 21$ __1__

9. $-6 + 4$ __-10__

10. $4 + (+3)$ __7__

11. $-9 + (+6)$ __-3__
$-9 + 6$

12. $5 + 12$ __-7__

13. $-4 + 9$ __-13__

14. $-2 + 10 + (-4)$ __-16__

15. $10 + (-8) + 15 + (+6)$ __-5__

16. $-2 + 6 + (-1) + (+3)$ __-6__
$-9 + 3$

Evaluate if $a = 2, b = -6$ and $c = 10$

17. $a - b + c$
$2 + {}^+6 + 10$
$\boxed{18}$

18. $c - b - a$
$10 + {}^+6 + 2$
$\boxed{14}$

19. $a - b - 2c$
$2 - {}^-6 - 2 \cdot 10$
$2 + {}^+6 + 20 = \boxed{-12}$

Homework is continued on the next page.