

Simplify each of the following expressions by removing the parentheses:
(1 pt. each)

1) $-(5) =$

-5

2) $-(9) =$

-9

3) $-(-19) =$

$+19$

4) $-(-34) =$

$+34$

5) $-(-4b) =$

$+4b$

6) $-(-5x) =$

$+5x$

7) $-(a+2) =$

$-a-2$

8) $-(b+9) =$

$-b-9$

9) $-(b-3) =$

$-b+3$

10) $-(x-8) =$

$-x+8$

11) $-(t-y) =$

$-t+y$

12) $-(a+b+c) =$

$-a-b-c$

13) $-(x+y+z) =$

$-x-y-z$

14) $-(8x-6y+13) =$

$-8x+6y-13$

15) $-(9a-7b+24) =$

$-9a+7b-24$

16) $-(m-n-s) =$

$-m+n+s$

17) $-(-2c+5d-3e+4f) =$

$+2c-5d+3e-4f$

18) $-(-4x+8y-5w+9z) =$

$+4x-8y+5w-9z$

19) $a+(2a+5) =$

$3a+5$

20) $x+(5x+9) =$

$6x+9$

Simplify each of the following expressions by removing the parentheses:
(1 pt. each)

21) $b - (b + 2) =$ -2

22) $x - (x + 7) =$ -7

23) $4m - (3m - 1) =$ $m + 1$

24) $5a - (4a - 3) =$ $a + 3$

Remove the parentheses and simplify:
(2 pts. each)

25) $3d - 7 - (5 - 2d) =$ $5d - 12$

26) $8x - 9 - (7 - 5x) =$ $13x - 16$

27) $-(p - q) + (p - q) =$ 0

28) $-(x - y) + (x - y) =$ 0

29) $(2a - 3b) + (-3a + 4b) =$ $-a + b$

30) $(3x - 5y) + (-8x + 7y) =$ $-5x + 2y$

31) $-2(x + 3) - 5(x - 4) =$ $-7x + 14$

32) $-9(y + 7) - 6(y - 3) =$ $-15y - 45$

Simplify the following:
(2 pts. each)

33) $-[-(-(-9))] =$ $+9$

34) $-\{-[-(-(-10))]\} =$ -10

35) $-\{-[-(-(-(-8)))]\} =$ $+8$

Use your calculator to remove the parentheses and simplify:
(4 pts. each)

$$36) \quad (87,573a - 47,924b) + (-578,563a + 903,408b) = \boxed{-490,990a + 855,484b}$$

$$37) \quad -348(107,324x + 57,820) - 927(33,429x - 88,007) = \boxed{-68,337,435x + 61,461,129}$$

$$38) \quad (0.00079x - 0.000843y) - (-0.007943x - 0.000059y) = \boxed{+.008733x - .000784y}$$

Remove the parentheses and simplify:
(3 pts. each)

$$39) \quad 2x + [4 - 3(4x - 5)] = \boxed{-10x + 19}$$

$$40) \quad 5y + [8 - 9(3y - 7)] = \boxed{-22y + 71}$$

$$41) \quad 9a - [7 - 5(7a - 3)] = \boxed{44a - 22}$$

$$42) \quad 12b - [9 - 7(5b - 6)] = \boxed{47b - 51}$$

$$43) \quad 5\{-2 + 3[4 - 2(3 + 5)] - (8 - 3)\} = \boxed{-215}$$

$$44) \quad 7\{-7 + 8[5 - 3(4 + 6)] - (9 - 4)\} = \boxed{-1484}$$

$$45) \quad [8(x - 2) + 9x] - \{7[3(2y - 5) - (8y + 7)] + 9\} = \boxed{17x + 14y + 129}$$

$$46) \quad [11(a - 3) + 12a] - \{6[4(3b - 7) - (9b + 10)] + 11\} = \boxed{23a - 18b + 184}$$

$$47) \quad -3[9(x - 4) + 5x] - 8\{3[5(3y + 4)] - 12\} = \boxed{-42x - 360y - 276}$$

$$48) \quad -6[8(y - 7) + 9y] - 7\{5[7(4z + 3)] - 14\} = \boxed{-102y - 980z - 301}$$

Evaluate the following expressions given ... $x = -2$, $y = 4$, $z = 1/3$, $a = -1$, $b = 1/2$
(2 pts. each)

49) $3x - 2y + 6z =$ -12

50) $2xy + 6az =$ -18

51) $4b^2x^2 =$ 4

52) $\frac{3y^2 - 4x}{ax + by} =$ 14

53) $\frac{x^2y(x+y)}{3x+4y} =$ 3.2

54) $\left(\frac{y}{x}\right)^3 - 4\left(\frac{a}{b}\right)^2 - \left(\frac{xy}{z^2}\right) =$ 48