

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

- 1) $- (5) =$
- 2) $- (9) =$
- 3) $- (-19) =$
- 4) $- (-34) =$
- 5) $- (-4b) =$
- 6) $- (-5x) =$
- 7) $- (a + 2) =$
- 8) $- (b + 9) =$
- 9) $- (b - 3) =$
- 10) $- (x - 8) =$
- 11) $- (t - y) =$
- 12) $- (a + b + c) =$
- 13) $- (x + y + z) =$
- 14) $- (8x - 6y + 13) =$
- 15) $- (9a - 7b + 24) =$
- 16) $- (m - n - s) =$
- 17) $- (-2c + 5d - 3e + 4f) =$
- 18) $- (-4x + 8y - 5w + 9z) =$
- 19) $a + (2a + 5) =$
- 20) $x + (5x + 9) =$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Simplify the following:
(2 pts. each)

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

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

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

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

$$36) \quad (87,573a - 47,924b) + (-578,563a + 903,408b) =$$

$$37) \quad -348(107,324x + 57,820) - 927(33,429x - 88,007) =$$

$$38) \quad (0.00079x - 0.000843y) - (-0.007943x - 0.000059y) =$$

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

$$39) \quad 2x + [4 - 3(4x - 5)] =$$

$$40) \quad 5y + [8 - 9(3y - 7)] =$$

$$41) \quad 9a - [7 - 5(7a - 3)] =$$

$$42) \quad 12b - [9 - 7(5b - 6)] =$$

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

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

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

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

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

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

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

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

50) $2xy + 6az =$

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

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

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

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