Multiplying Out Brackets

Remove the brackets in the following expressions:
Example: 4(a + 2) = 4a + 8

1.   6(s + 4)   2.   8(p + 7)

3.   9(q – 5)   4.   7(r – 9)

5.   d(d + 3)   6.   h(h + 4)

7.   k(k – 8)   8.   e(e – 2)

9.   -3(x + 2)   10.   -2(t - 5)

Multiply out the brackets and collect like terms in the following:
Example: 4(a + 2) + 10   =   4a + 18

11.   5(g + 7) + 13   12.   6(d + 8) + 18

13.   8(3r + 5) – 24   14.   9(4f – 3) – 9

15.   6(5w + 3) – 2w   16.   9r + 7(5r – 2)

17.   6r -5(6 – 7r)   18.   8(4 – y) – 5y

19.   4(3w – 5) + 7w   20.   6(7 – 2s) – 9s

See next page for answers.

Multiplying Out Brackets Solutions

Remove the brackets in the following expressions:
Example: 4(a + 2) = 4a + 8

1.   6(s + 4) = 6s + 24

2.   8(p + 7) = 8p + 56

3.   9(q – 5) = 9q - 45

4.   7(r – 9) = 7r - 63

5.   d(d + 3) = d² + 3d

6.   8(h + 4) = 8h + 32

7.   4(k – 8) = 4k - 32

8.   e(e – 2) = e² - 2e

9.   -3(x + 2) = -3x - 6

10.   -2(t - 5) = -2t + 10

Multiply out the brackets and collect like terms in the following:
Example: 4(a + 2) + 10   =   4a + 18

11.   5(g + 7) + 13 = 5g + 48

12.   6(d + 8) + 18 = 6d + 66

13.   8(3r + 5) – 24 = 24r + 16

14.   9(4f – 3) – 9 = 36f -36

15.   6(5w + 3) – 2 = 30w + 16

16.   9r + 7(5r – 2) = 44r - 14

17.   6r -5(6 – 7r) = 41r - 30

18.   8(4 – y) – 5y = 32 -13y

19.   7 - 4(3w – 5) = 27 - 12w

20.   11 - (7 – 2s) = 4 + 2s