

Expanding and Simplifying Brackets (Squared and Negative) Worksheet

Expand and simplify each of the following expressions. Show all your working.

1. Expand and simplify: $(x + 3)^2$
2. Expand and simplify: $(2x - 5)^2$
3. Expand and simplify: $(x - 4)(x + 4)$
4. Expand and simplify: $-(x + 2)^2$
5. Expand and simplify: $(3x - 2)^2$
6. Expand and simplify: $-(2x - 3)^2$
7. Expand and simplify: $(x - 5)^2$
8. Expand and simplify: $-(x - 6)(x + 6)$
9. Expand and simplify: $(2x + 7)^2$
10. Expand and simplify: $-(x - 1)^2$

Maths with Melissa

Answer Key

1. $(x + 3)^2 = x^2 + 6x + 9$

2. $(2x - 5)^2 = 4x^2 - 20x + 25$

3. $(x - 4)(x + 4) = x^2 - 16$

4. $-(x + 2)^2 = -(x^2 + 4x + 4) = -x^2 - 4x - 4$

5. $(3x - 2)^2 = 9x^2 - 12x + 4$

6. $-(2x - 3)^2 = -(4x^2 - 12x + 9) = -4x^2 + 12x - 9$

7. $(x - 5)^2 = x^2 - 10x + 25$

8. $-(x - 6)(x + 6) = -(x^2 - 36) = -x^2 + 36$

9. $(2x + 7)^2 = 4x^2 + 28x + 49$

10. $-(x - 1)^2 = -(x^2 - 2x + 1) = -x^2 + 2x - 1$