Simplifying and expanding

Name: _____ Date: _____



Mr Boston says: Each term keeps the sign in front of it.

A. Collecting like terms

1 Simplify 5a + 3a − 2a.

Answer: _____

2 Simplify 4x + 7 + 2x − 3.

Answer: _____

3 Simplify 3p + 2q + 5p − q.

Answer: _____

4 Simplify 9m − 4n − 3m + 6n.

Answer: _____

5 Simplify 2a × 5b.

Answer: _____

6 Simplify 12x ÷ 4.

Answer: _____

B. Expanding brackets

7 Expand 3(x + 4).

Answer: _____

8 Expand 5(2y − 3).

Answer: _____

9 Expand −2(a + 6).

Answer: _____

10 Expand x(x + 7).

Answer: _____

11 Expand and simplify 2(x + 3) + 4(x − 1).

Answer: _____

12 Expand and simplify 5(n + 2) − 3(n − 1).

Answer: _____

C. Factorising

13 Factorise 6x + 18.

Answer: _____

14 Factorise 10a − 15.

Answer: _____

15 Factorise 8y + 12.

Answer: _____

16 Factorise $x^2 + 5x$.

Answer: _____

Answers for grown-ups

Simplifying and expanding

1. Simplify 5a + 3a − 2a. → **6a**
2. Simplify 4x + 7 + 2x − 3. → **6x + 4**
3. Simplify 3p + 2q + 5p − q. → **8p + q**
4. Simplify 9m − 4n − 3m + 6n. → **6m + 2n**
5. Simplify 2a × 5b. → **10ab**
6. Simplify 12x ÷ 4. → **3x**
7. Expand 3(x + 4). → **3x + 12**
8. Expand 5(2y − 3). → **10y − 15**
9. Expand −2(a + 6). → **−2a − 12**
10. Expand x(x + 7). → **$x^2 + 7x$**
11. Expand and simplify 2(x + 3) + 4(x − 1). → **6x + 2**
12. Expand and simplify 5(n + 2) − 3(n − 1). → **2n + 13**
13. Factorise 6x + 18. → **6(x + 3)**
14. Factorise 10a − 15. → **5(2a − 3)**
15. Factorise 8y + 12. → **4(2y + 3)**
16. Factorise $x^2 + 5x$. → **$x(x + 5)$**