

Factorising into a Single Bracket *fluency*

ANSWERS

 Factorise fully

1 $6x + 9$

$3(2x + 3)$

2 $10y - 15$

$5(2y - 3)$

3 $4a + 8$

$4(a + 2)$

4 $12m - 18$

$6(2m - 3)$

5 $14 + 21p$

$7(2 + 3p)$

6 $9k - 3$

$3(3k - 1)$

 Factorise fully

7 $x^2 + 5x$

$x(x + 5)$

8 $y^2 - 7y$

$y(y - 7)$

9 $3a^2 + a$

$a(3a + 1)$

10 $p^2 + pq$

$p(p + q)$

11 $6m - m^2$

$m(6 - m)$

12 $t^3 + 4t$

$t(t^2 + 4)$

 Factorise fully

13 $4x^2 + 6x$

$2x(2x + 3)$

14 $10y^2 - 15y$

$5y(2y - 3)$

15 $6a^2 + 12a$

$6a(a + 2)$

16 $8m^3 - 4m^2$

$4m^2(2m - 1)$

17 $9t - 12t^2$

$3t(3 - 4t)$

18 $20k^2 + 30k^3$

$10k^2(2 + 3k)$

 Factorise fully

19 $6xy + 9x$

$3x(2y + 3)$

20 $12pq - 8p$

$4p(3q - 2)$

21 $5x^2y + 10xy$

$5xy(x + 2)$

22 $14mn - 21n^2$

$7n(2m - 3n)$

23 $18ac^2 - 24a^2c$

$6ac(3c - 4a)$

24 $7x^2y^2 + 21xy^3$

$7xy^2(x + 3y)$

 Factorise fully

25 $3x^2 + 6x - 12$

$3(x^2 + 2x - 4)$

26 $4ac + 8a - 12a^2$

$4a(c + 2 - 3a)$

27 $6x^2y - 9xy^2 + 3xy$

$3xy(2x - 3y + 1)$

28 $10m^3 - 5m^2 + 15m$

$5m(2m^2 - m + 3)$

29 $2p^2q + 6pq^2 - 4pq$

$2pq(p + 3q - 2)$

30 $12t^4 - 18t^3 + 24t^2$

$6t^2(2t^2 - 3t + 4)$