

# Factorising Simple Algebraic Expressions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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**Instructions:** Factorise each expression by taking out the highest common factor (HCF).

*Example:*  $6x + 9 = 3(2x + 3)$

## Part A: Basic Factorising

1.  $4x + 8 =$  \_\_\_\_\_

2.  $6y + 12 =$  \_\_\_\_\_

3.  $15a + 20 =$  \_\_\_\_\_

4.  $9m - 18 =$  \_\_\_\_\_

5.  $14p - 21 =$  \_\_\_\_\_

6.  $10n + 25 =$  \_\_\_\_\_

## Part B: Factorising with Variables

7.  $3x + 3y =$  \_\_\_\_\_

8.  $5a - 5b =$  \_\_\_\_\_

9.  $8m + 12n =$  \_\_\_\_\_

10.  $6x - 9y =$  \_\_\_\_\_

11.  $12p + 18q =$  \_\_\_\_\_

## Part C: Factorising with Powers

12.  $4x^2 + 8x =$  \_\_\_\_\_

13.  $6y^2 - 9y =$  \_\_\_\_\_

14.  $10a^2 + 15a =$  \_\_\_\_\_

15.  $12m^2 - 18m =$  \_\_\_\_\_

## Part D: Challenge Questions

16.  $15x^2 + 10x + 5 =$  \_\_\_\_\_

17.  $12a^2b + 18ab =$  \_\_\_\_\_

18.  $20xy - 15x =$  \_\_\_\_\_