Factorising common factors

6 questions | 13 marks

Equivalent correct methods earn the corresponding marks.

1. Factorise fully $4x + 8$. [2 marks]

Extract 4.

Answer: $4(x + 2)$

2. Factorise fully $15a - 10$. [2 marks]

Extract 5 and preserve the subtraction.

Answer: $5(3a - 2)$

3. Factorise fully $9p + 12q$. [2 marks]

The coefficients share 3, but the variable parts differ.

Answer: $3(3p + 4q)$

4. Factorise fully $5x^2 + 20x$. [2 marks]

Both terms contain $5x$.

Answer: $5x(x + 4)$

5. Factorise fully $14m^2 - 21m$. [2 marks]

Both terms contain $7m$.

Answer: $7m(2m - 3)$

6. A student writes $12x + 18 = 3(4x + 6)$. Is this correct and fully factorised? [3 marks]

Expansion gives the original expression.

The bracket still has common factor 2.

Answer: Correct, but not fully factorised: $6(2x + 3)$.