# Common-factor factorisation

6 questions | 14 marks

Equivalent correct methods earn the corresponding marks.

**1.** Factorise $4x + 12$. [2 marks]

Divide both terms by 4.

**Answer:** $4(x + 3)$

**2.** Fully factorise $18a - 24$. [2 marks]

The greatest common coefficient factor is 6.

**Answer:** $6(3a - 4)$

**3.** Fully factorise $7p^2 + 14p$. [2 marks]

Take out $7p$.

**Answer:** $7p(p + 2)$

**4.** Fully factorise $15x^2y - 10xy^2$. [3 marks]

Both terms share $5xy$.

Dividing gives $3x$ and $-2y$.

**Answer:** $5xy(3x - 2y)$

**5.** Factorise $-6x - 18$ using a negative factor. [2 marks]

Divide both terms by $-6$.

**Answer:** $-6(x + 3)$

**6.** A student writes $12a + 12 = 12(a + 0)$. Correct and check the result. [3 marks]

$12 \div 12 = 1$.

$12(a + 1) = 12a + 12$.

**Answer:** $12(a + 1)$