

Factorisation/Fractions

1. (a) Factorise $x^2 - 6x$ (b) Hence simplify $\frac{x^2 - 6x}{x^2 - 36}$
2. (a) Factorise $x^2 - 16$ (b) Hence simplify $\frac{x^2 - 16}{x^2 - 6x + 8}$
3. (a) Factorise $2m^2 - 4m$ (b) Hence simplify $\frac{2m^2 - 4m}{m^2 + 3m - 10}$
4. (a) Factorise $3p^2 + 15p$ (b) Hence simplify $\frac{3p^2 + 15p}{p^2 - p - 30}$
5. (a) Factorise $u^2 - 100$ (b) Hence simplify $\frac{u^2 - 100}{u^2 + 7u - 30}$
6. (a) Factorise $n^2 - 25$ (b) Hence simplify $\frac{n^2 - 25}{2n^2 - 7n - 15}$
7. (a) Factorise $4x^2 + 16x$ (b) Hence simplify $\frac{4x^2 + 16x}{2x^2 - 32}$
8. (a) Factorise $x^2 + 3x - 18$ (b) Hence simplify $\frac{x^2 + 3x - 18}{2x^2 + 12x}$
9. (a) Factorise $x^2 - 4x - 12$ (b) Hence simplify $\frac{x^2 - 4x - 12}{3x^2 + 5x - 2}$
10. (a) Factorise $5c^2 - 24c - 5$ (b) Hence simplify $\frac{5c^2 - 24c - 5}{c^2 - 25}$
11. (a) Factorise $2n^2 - 3n - 9$ (b) Hence simplify $\frac{2n^2 - 3n - 9}{4n^2 - 9}$
12. (a) Factorise $6x^2 + 5x - 4$ (b) Hence simplify $\frac{6x^2 + 5x - 4}{2x^2 + 5x - 3}$