

1) Simplify fully

a) $\frac{9x^2}{21x^3}$

b) $\frac{10xy^3}{5y^2}$

c) $\frac{18a^3b^2}{2ab^2}$

d) $\frac{4x^2 + 12x}{10x}$

e) $\frac{2a^2b - 14a^2b^3}{6a^3b^3}$

f) $\frac{5x^2y + 5xy^2}{10x^2y^2}$

2) Simplify fully

a) $\frac{x^2 + x}{x^2 + 6x + 5}$

b) $\frac{x^2 - 6x + 8}{2x^2 - 8x}$

c) $\frac{x^2 + 7x + 10}{x^2 + 5x}$

3) a) Factorise $4x^2 - 12x + 9$

b) Simplify $\frac{6x^2 - 7x - 3}{4x^2 - 12x + 9}$