

1F/G Top Heavy Fractions

1. Given that $\frac{x^3+x^2-7}{x-3} \equiv Ax^2 + Bx + C + \frac{D}{x-3}$, find the values of A, B, C and D

2. Given that:

$$x^4 + x^3 + x - 10 \equiv (Ax^2 + Bx + C)(x^2 + 2x - 3) + Dx + E$$

find the values of A, B, C, D and E .

3. Split

$$\frac{3x^2 - 3x - 2}{(x - 1)(x - 2)}$$

into partial fractions