

Partial Fraction Decomposition

Find the partial fraction decomposition for the following.

$$1. \frac{4x-1}{x^2+x-2}$$

$$2. \frac{6x^2-7x-1}{(x-1)(x+1)(x-2)}$$

$$3. \frac{4x-3}{x(x-1)}$$

$$4. \frac{2x}{x^2-1}$$

$$5. \frac{x+4}{x^2+2x-3}$$

$$6. \frac{1}{x^2+3x+2}$$

Partial Fraction Decomposition

$$7. \frac{2x^2 + 4x + 3}{x(x+1)^2} =$$

$$8. \frac{x^2 - 3x}{(1+x)(x-1)^2} =$$

$$9. \frac{12x^2 + 2x + 3}{4x^3 + x} =$$

$$10. \frac{4x + 2}{3x^2 - 14x - 5} =$$