

Maths.scot



National 5 Maths

Simplifying Algebraic Fractions

SQA past paper and specimen paper questions and answers by topic

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National 5 Maths
SQA 2015 Paper 1
Question 12

Simplify $\frac{x^2 - 4x}{x^2 + x - 20}$.

3

Answer:

$$\frac{x}{x+5}$$

National 5 Maths
SQA 2017 Paper 2
Question 9

-
- (a) Factorise $4x^2 - 25$. 1
- (b) Hence simplify $\frac{4x^2 - 25}{2x^2 - x - 10}$. 3
-

Answers:

(a) $(2x - 5)(2x + 5)$

(b) $\frac{2x + 5}{x + 2}$

National 5 Maths
SQA 2019 Paper 2
Question 13

Find an expression for the gradient of the line joining point A(6,9) to point B(4p,4p²).

Give your answer in its simplest form.

3

Answer:

$$\frac{2p+3}{2}$$

National 5 Maths
SQA 2022 Paper 2
Question 12

Simplify $\frac{2ab + 6a}{b^2 - 9}$.

3

Answer:

$$\frac{2a}{b-3}$$

National 5 Maths
SQA 2023 Paper 2
Question 12

Simplify $\frac{x^2 - 16}{x^2 + x - 20}$.

3

Answer:

$$\frac{x+4}{x+5}$$

National 5 Maths
SQA 2024 Paper 2
Question 6

-
- (a) Factorise $y^2 - 6y$. 1
- (b) Hence simplify $\frac{y^2 - 6y}{y^2 - 3y - 18}$. 2
-

Answers:

(a) $y(y - 6)$

(b) $\frac{y}{y + 3}$