

Maths.scot



National 5 Maths

Rationalising the Denominator

SQA past paper and specimen paper questions and answers by topic

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Express $\frac{4}{\sqrt{6}}$ with a rational denominator in its simplest form.

2

Answer:

$$\frac{2\sqrt{6}}{3}$$

National 5 Maths
SQA 2015 Paper 1
Question 13

Express $\frac{4}{\sqrt{8}}$ with a rational denominator.

Give your answer in its simplest form.

3

Answer:

$$\sqrt{2}$$

National 5 Maths
SQA 2016 Paper 1
Question 9

The function $f(x)$ is defined by $f(x) = \frac{2}{\sqrt{x}}$, $x > 0$.

Express $f(5)$ as a fraction with a rational denominator.

2

Answer:

$$\frac{2\sqrt{5}}{5}$$

National 5 Maths
SQA 2018 Paper 1
Question 11

Express $\frac{9}{\sqrt{6}}$ with a rational denominator.

Give your answer in its simplest form.

2

Answer:

$$\frac{3\sqrt{6}}{2}$$

National 5 Maths
SQA 2019 Paper 1
Question 12

Express $\frac{\sqrt{2}}{\sqrt{40}}$ as a fraction with a rational denominator.

Give your answer in its simplest form.

3

Answer:

$$\frac{\sqrt{5}}{10}$$

National 5 Maths
SQA 2023 Paper 1
Question 8

Express $\frac{12}{\sqrt{15}}$ with a rational denominator.

Give your answer in its simplest form.

2

Answer:

$$\frac{4\sqrt{15}}{5}$$

National 5 Maths
SQA 2025 Paper 1
Question 12

Express $\frac{6}{\sqrt{10}}$ with a rational denominator.

Give your answer in its simplest form.

2

Answer:

$$\frac{3\sqrt{10}}{5}$$