Rationalising the Denominator

1

Rationalise the denominator. $\frac{5}{\sqrt{2}}$

$$\frac{5}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\square}{\square}$$

Answer _____

2

Rationalise the denominator. $\frac{1}{\sqrt{3}}$

$$\frac{1}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{\square}{\square}$$

Answer _____

3

Rationalise the denominator. $\frac{3}{\sqrt{7}}$

$$\frac{3}{\sqrt{7}} \times \frac{\square}{\square} = \frac{\square}{\square}$$

Answer _____

4

Rationalise the denominator. $\frac{2}{\sqrt{5}}$

Answer _____

5

Rationalise the denominator. $\frac{4}{\sqrt{2}}$

$$\frac{4}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{2}$$

$$= \square\sqrt{\square}$$

Answer _____

6

Rationalise the denominator. $\frac{15}{\sqrt{5}}$

$$\frac{15}{\sqrt{5}} \times \frac{\sqrt{5}}{\sqrt{5}} = \frac{\square}{\square}$$

$$= \square\sqrt{\square}$$

Answer _____

7

Rationalise the denominator. $\frac{6}{\sqrt{3}}$

$$\frac{6}{\sqrt{3}} \times \frac{\square}{\square} = \frac{\square}{\square}$$

$$= \square\sqrt{\square}$$

Answer _____

8

Write $\frac{22}{\sqrt{11}}$ with a rational denominator.

Answer _____

Rationalising the Denominator *further practice*

9

Rationalise the denominator. Simplify your answer if you can.

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

Answer _____

10

Rationalise the denominator. Simplify your answer if you can.

$\frac{8}{\sqrt{2}}$

Answer _____

11

Rationalise the denominator. Simplify your answer if you can.

$\frac{7}{\sqrt{2}}$

Answer _____

12

Rationalise the denominator. Simplify your answer if you can.

$\frac{20}{\sqrt{5}}$

Answer _____

13

Rationalise the denominator. $\frac{\sqrt{5}}{\sqrt{2}}$

Answer _____

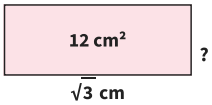
14

Rationalise the denominator. $\frac{\sqrt{2}}{\sqrt{3}}$

Answer _____

15

A rectangle has an area of 12 cm². Its length is $\sqrt{3}$ cm. Find its width. Give your answer in the form $a\sqrt{3}$.



Answer _____

16

Leo says $\frac{10}{\sqrt{2}} = 5$. What has Leo done wrong? Find the right answer.

Answer _____