

Name: _____

Level 2 Further Maths



Rationalising Denominators Corbettmaths

Ensure you have: Pencil or pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Revision for this topic

www.corbettmaths.com/more/further-maths/



1. Rationalise the denominator and simplify fully $\frac{9}{\sqrt{10} + 3}$

.....
(3)

2. Rationalise the denominator of $\frac{33}{4 - \sqrt{5}}$

Give your answer in the form $a + b\sqrt{5}$ where a and b are integers.

.....
(3)

3. Rationalise and simplify $\frac{\sqrt{5} - 7}{\sqrt{5} + 1}$

Give your answer in the form $a + b\sqrt{5}$ where a and b are integers.

(4)

4. Rationalise and simplify $\frac{18 - \sqrt{6}}{3 - \sqrt{6}}$

Give your answer in the form $a + b\sqrt{6}$ where a and b are integers.

(4)

5. Simplify fully $\frac{20 - \sqrt{50}}{3\sqrt{2} - 5}$

Give your answer in the form $a + b\sqrt{2}$ where a and b are integers.

.....
(5)

6. Write $\frac{6\sqrt{12}}{3 - \sqrt{5}}$ in the form $\sqrt{x} + \sqrt{y}$ where x and y are integers.

.....
(5)

7. Rationalise and simplify $\frac{17\sqrt{3} + 5\sqrt{5}}{2\sqrt{3} - \sqrt{5}}$

.....
(5)