

Marks are indicated in brackets after each question number

2014 Paper 1 Question 8, (3)

$$\begin{aligned}\sqrt{40} + 4\sqrt{10} + \sqrt{90} &= \sqrt{4 \times 10} + 4\sqrt{10} + \sqrt{9 \times 10} \\ &= 2\sqrt{10} + 4\sqrt{10} + 3\sqrt{10} \\ &= 9\sqrt{10}\end{aligned}$$

2015 Paper 1 Question 13, (3)

$$\begin{aligned}\frac{4}{\sqrt{8}} &= \frac{4}{\sqrt{8}} \times \frac{\sqrt{8}}{\sqrt{8}} \\ &= \frac{4\sqrt{8}}{8} \\ &= \frac{\sqrt{8}}{2} \\ &= \frac{2\sqrt{2}}{2} \\ &= \sqrt{2}\end{aligned}$$

2016 Paper 1 Question 9, (2)

$$f(x) = \frac{2}{\sqrt{x}}$$

$$f(5) = \frac{2}{\sqrt{5}}$$

$$\begin{aligned} &= \frac{2}{\sqrt{5}} \times \frac{\sqrt{5}}{\sqrt{5}} \\ &= \frac{2\sqrt{5}}{5} \end{aligned}$$

2018 Paper 1 Question 11, (2)

$$\begin{aligned} \frac{9}{\sqrt{6}} &= \frac{9}{\sqrt{6}} \times \frac{\sqrt{6}}{\sqrt{6}} \\ &= \frac{9\sqrt{6}}{6} \\ &= \frac{3\sqrt{6}}{2} \end{aligned}$$

2019 Paper 1 Question 12, (3)

$$\begin{aligned} \frac{\sqrt{2}}{\sqrt{40}} &= \frac{\sqrt{2}}{\sqrt{2} \sqrt{20}} \\ &= \frac{1}{\sqrt{20}} \\ &= \frac{1}{\sqrt{20}} \times \frac{\sqrt{20}}{\sqrt{20}} \\ &= \frac{\sqrt{20}}{20} \\ &= \frac{\sqrt{4} \sqrt{5}}{20} \\ &= \frac{2\sqrt{5}}{20} = \frac{\sqrt{5}}{10} \end{aligned}$$