

الجذور المربعة

التمرين 1

بسّط ما يلي :

$$\begin{aligned} & \sqrt{\left(\frac{2}{5}\right)^2} \,, \sqrt{(3,14)^2} \,, \sqrt{900} \,, \sqrt{0,01} \,, \sqrt{100} \,, \sqrt{4} \\ & \sqrt{162} \,, \sqrt{98} \,, \sqrt{50} \,, \sqrt{300} \,, \sqrt{27} \,, \sqrt{12} \\ & \sqrt{288} \,, \sqrt{847} \,, \sqrt{637} \,, \sqrt{192} \,, \sqrt{216} \,, \sqrt{63} \\ & \sqrt{\frac{121}{100}} \,, \sqrt{\frac{1}{81}} \,, \sqrt{\frac{49}{36}} \,, \sqrt{\frac{9}{25}} \end{aligned}$$

التمرين 2

بسّط ما يلي :

$$\begin{aligned} & -3\sqrt{2} \times (-5\sqrt{2}) \,, \sqrt{2} \times 3\sqrt{2} \,, -\sqrt{2} \times \sqrt{2} \,, 3\sqrt{5} \times 4\sqrt{5} \\ & \sqrt{2} \times \sqrt{2} \times \sqrt{2} \,, 5\sqrt{5} \times (-2\sqrt{5}) \,, 7\sqrt{3} \times (-2\sqrt{3}) \\ & \sqrt{2} \times \sqrt{50} \,, \sqrt{12} \times \sqrt{3} \,, \sqrt{2} \times \sqrt{10} \times \sqrt{500} \,, \sqrt{2} \times \sqrt{3} \times \sqrt{4} \times \sqrt{6} \end{aligned}$$

التمرين 3

بسّط مايلي :

$$\begin{aligned} A &= \sqrt{27} - 3\sqrt{75} \,, \quad B = \sqrt{20} - 12\sqrt{5} + 2\sqrt{125} \,, \quad N = \sqrt{20} - \sqrt{45} - 7\sqrt{5} \\ C &= 5\sqrt{27} - 3\sqrt{3} + \sqrt{12} \,, \quad D = \sqrt{12} + 2\sqrt{48} - \sqrt{75} \\ E &= \sqrt{45} - 2\sqrt{5} + \sqrt{500} \,, \quad F = 4\sqrt{5} - 3\sqrt{45} + \sqrt{500} \end{aligned}$$

التمرين 4

احذف الجذر المربع من مقامات الأعداد التالية :

$$\begin{aligned} & \frac{\sqrt{2}}{\sqrt{3}} \,, \frac{\sqrt{4}}{\sqrt{11}} \,, \frac{\sqrt{5}}{\sqrt{7}} \,, \frac{1}{\sqrt{5}} \,, \frac{4}{\sqrt{7}} \,, \frac{2}{\sqrt{3}} \\ & \frac{2+3\sqrt{2}}{2-3\sqrt{2}} \,, \frac{\sqrt{3}-2}{\sqrt{5}+2} \,, \frac{\sqrt{2}-1}{\sqrt{2}+1} \,, \frac{4}{3-\sqrt{2}} \,, \frac{1}{\sqrt{3}+1} \end{aligned}$$