

Rationalising the denominator

Rationalise the denominator,

1) $\frac{2}{4 + \sqrt{7}}$

11) $\frac{3}{4 + \sqrt{3}}$

2) $\frac{4}{2 + \sqrt{3}}$

12) $\frac{5}{3 + \sqrt{6}}$

3) $\frac{4}{4 + \sqrt{6}}$

13) $\frac{3}{5 + \sqrt{7}}$

4) $\frac{2}{4 + \sqrt{5}}$

14) $\frac{4}{3 + \sqrt{5}}$

5) $\frac{2}{4 + \sqrt{3}}$

15) $\frac{3}{4 + \sqrt{3}}$

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

16) $\frac{2}{3 + \sqrt{5}}$

7) $\frac{4}{4 + \sqrt{7}}$

17) $\frac{5}{2 + \sqrt{6}}$

8) $\frac{5}{2 + \sqrt{7}}$

18) $\frac{3}{3 + \sqrt{2}}$

9) $\frac{3}{3 + \sqrt{7}}$

19) $\frac{2}{5 + \sqrt{5}}$

10) $\frac{4}{2 + \sqrt{7}}$

20) $\frac{5}{5 + \sqrt{6}}$

Rationalising the denominator

$$1) \frac{2}{4 + \sqrt{7}} = \frac{8 - 2\sqrt{7}}{9}$$

$$11) \frac{3}{4 + \sqrt{3}} = \frac{12 - 3\sqrt{3}}{13}$$

$$2) \frac{4}{2 + \sqrt{3}} = 8 - 4\sqrt{3}$$

$$12) \frac{5}{3 + \sqrt{6}} = \frac{15 - 5\sqrt{6}}{3}$$

$$3) \frac{4}{4 + \sqrt{6}} = \frac{8 - 2\sqrt{6}}{5}$$

$$13) \frac{3}{5 + \sqrt{7}} = \frac{5 - \sqrt{7}}{6}$$

$$4) \frac{2}{4 + \sqrt{5}} = \frac{8 - 2\sqrt{5}}{11}$$

$$14) \frac{4}{3 + \sqrt{5}} = 3 - \sqrt{5}$$

$$5) \frac{2}{4 + \sqrt{3}} = \frac{8 - 2\sqrt{3}}{13}$$

$$15) \frac{3}{4 + \sqrt{3}} = \frac{12 - 3\sqrt{3}}{13}$$

$$6) \frac{3}{2 + \sqrt{3}} = 6 - 3\sqrt{3}$$

$$16) \frac{2}{3 + \sqrt{5}} = \frac{3 - \sqrt{5}}{2}$$

$$7) \frac{4}{4 + \sqrt{7}} = \frac{16 - 4\sqrt{7}}{9}$$

$$17) \frac{5}{2 + \sqrt{6}} = \frac{-10 + 5\sqrt{6}}{2}$$

$$8) \frac{5}{2 + \sqrt{7}} = \frac{-10 + 5\sqrt{7}}{3}$$

$$18) \frac{3}{3 + \sqrt{2}} = \frac{9 - 3\sqrt{2}}{7}$$

$$9) \frac{3}{3 + \sqrt{7}} = \frac{9 - 3\sqrt{7}}{2}$$

$$19) \frac{2}{5 + \sqrt{5}} = \frac{5 - \sqrt{5}}{10}$$

$$10) \frac{4}{2 + \sqrt{7}} = \frac{-8 + 4\sqrt{7}}{3}$$

$$20) \frac{5}{5 + \sqrt{6}} = \frac{25 - 5\sqrt{6}}{19}$$