

Solutions – Rationalising the Denominator (A)

Rationalise the denominator $4/(2 - \sqrt{6})$

$$(8 + 4\sqrt{6})/-2$$

Rationalise the denominator $(1 + \sqrt{5})/(4 - \sqrt{6})$

$$(9 + \sqrt{6} + 4\sqrt{5})/10$$

Rationalise the denominator $(6 + \sqrt{3})/(4 + \sqrt{3})$

$$(21 - 6\sqrt{3} + 4\sqrt{3})/13$$

Rationalise the denominator $7/(7 + \sqrt{4})$

$$(49 - 7\sqrt{4})/45$$

Rationalise the denominator $(6 + \sqrt{3})/(4 + \sqrt{6})$

$$(21 - 6\sqrt{6} + 4\sqrt{3})/10$$

Rationalise the denominator $3/(6 - \sqrt{2})$

$$(18 + 3\sqrt{2})/34$$

Solutions – Rationalising the Denominator (B)

Rationalise the denominator $1/(7 + \sqrt{4})$

$$(7 - \sqrt{4})/45$$

Rationalise the denominator $4/(3 - \sqrt{4})$

$$(12 + 4\sqrt{4})/5$$

Rationalise the denominator $2/(5 - \sqrt{6})$

$$(10 + 2\sqrt{6})/19$$

Rationalise the denominator $(1 + \sqrt{4})/(2 - \sqrt{2})$

$$(6 + \sqrt{2} + 2\sqrt{4})/2$$

Rationalise the denominator $(1 + \sqrt{5})/(5 + \sqrt{6})$

$$(0 - \sqrt{6} + 5\sqrt{5})/19$$

Rationalise the denominator $(2 + \sqrt{3})/(2 - \sqrt{6})$

$$(7 + 2\sqrt{6} + 2\sqrt{3})/-2$$

Solutions – Rationalising the Denominator (C)

Rationalise the denominator $5/(2 - \sqrt{5})$

$$(10 + 5\sqrt{5})/-1$$

Rationalise the denominator $(3 + \sqrt{4})/(5 + \sqrt{2})$

$$(11 - 3\sqrt{2} + 5\sqrt{4})/23$$

Rationalise the denominator $(4 + \sqrt{3})/(5 - \sqrt{6})$

$$(23 + 4\sqrt{6} + 5\sqrt{3})/19$$

Rationalise the denominator $(3 + \sqrt{4})/(5 + \sqrt{3})$

$$(11 - 3\sqrt{3} + 5\sqrt{4})/22$$

Rationalise the denominator $7/(9 + \sqrt{3})$

$$(63 - 7\sqrt{3})/78$$

Rationalise the denominator $7/(3 + \sqrt{5})$

$$(21 - 7\sqrt{5})/4$$

Solutions – Rationalising the Denominator (D)

Rationalise the denominator $(1 + \sqrt{3})/(5 - \sqrt{4})$

$$(8 + \sqrt{4} + 5\sqrt{3})/21$$

Rationalise the denominator $1/(1 - \sqrt{2})$

$$(1 + \sqrt{2})/-1$$

Rationalise the denominator $(2 + \sqrt{2})/(4 + \sqrt{6})$

$$(6 - 2\sqrt{6} + 4\sqrt{2})/10$$

Rationalise the denominator $(4 + \sqrt{4})/(7 + \sqrt{2})$

$$(24 - 4\sqrt{2} + 7\sqrt{4})/47$$

Rationalise the denominator $6/(3 - \sqrt{6})$

$$(18 + 6\sqrt{6})/3$$

Rationalise the denominator $6/(8 + \sqrt{4})$

$$(48 - 6\sqrt{4})/60$$

Solutions – Rationalising the Denominator (E)

Rationalise the denominator $(6 + \sqrt{4})/(5 - \sqrt{6})$

$$(34 + 6\sqrt{6} + 5\sqrt{4})/19$$

Rationalise the denominator $9/(1 - \sqrt{3})$

$$(9 + 9\sqrt{3})/-2$$

Rationalise the denominator $(1 + \sqrt{4})/(7 + \sqrt{3})$

$$(3 - \sqrt{3} + 7\sqrt{4})/46$$

Rationalise the denominator $(1 + \sqrt{5})/(4 + \sqrt{3})$

$$(-1 - \sqrt{3} + 4\sqrt{5})/13$$

Rationalise the denominator $9/(7 + \sqrt{4})$

$$(63 - 9\sqrt{4})/45$$

Rationalise the denominator $3/(1 + \sqrt{3})$

$$(3 - 3\sqrt{3})/-2$$

Solutions – Rationalising the Denominator (F)

Rationalise the denominator $4/(6 + \sqrt{4})$

$$(24 - 4\sqrt{4})/32$$

Rationalise the denominator $(2 + \sqrt{3})/(4 + \sqrt{6})$

$$(5 - 2\sqrt{6} + 4\sqrt{3})/10$$

Rationalise the denominator $(5 + \sqrt{2})/(4 + \sqrt{6})$

$$(18 - 5\sqrt{6} + 4\sqrt{2})/10$$

Rationalise the denominator $(1 + \sqrt{6})/(3 - \sqrt{6})$

$$(9 + \sqrt{6} + 3\sqrt{6})/3$$

Rationalise the denominator $9/(2 - \sqrt{6})$

$$(18 + 9\sqrt{6})/-2$$

Rationalise the denominator $9/(3 - \sqrt{4})$

$$(27 + 9\sqrt{4})/5$$

Solutions – Rationalising the Denominator (G)

Rationalise the denominator $(4 + \sqrt{4})/(1 - \sqrt{3})$

$$(8 + 4\sqrt{3} + \sqrt{4})/-2$$

Rationalise the denominator $3/(3 - \sqrt{3})$

$$(9 + 3\sqrt{3})/6$$

Rationalise the denominator $(5 + \sqrt{6})/(6 - \sqrt{2})$

$$(36 + 5\sqrt{2} + 6\sqrt{6})/34$$

Rationalise the denominator $6/(1 - \sqrt{2})$

$$(6 + 6\sqrt{2})/-1$$

Rationalise the denominator $8/(3 + \sqrt{5})$

$$(24 - 8\sqrt{5})/4$$

Rationalise the denominator $(4 + \sqrt{6})/(3 + \sqrt{6})$

$$(6 - 4\sqrt{6} + 3\sqrt{6})/3$$

Solutions – Rationalising the Denominator (H)

Rationalise the denominator $(5 + \sqrt{6})/(8 - \sqrt{5})$

$$(46 + 5\sqrt{5} + 8\sqrt{6})/59$$

Rationalise the denominator $3/(2 - \sqrt{3})$

$$(6 + 3\sqrt{3})/1$$

Rationalise the denominator $8/(7 + \sqrt{2})$

$$(56 - 8\sqrt{2})/47$$

Rationalise the denominator $(2 + \sqrt{6})/(8 + \sqrt{3})$

$$(10 - 2\sqrt{3} + 8\sqrt{6})/61$$

Rationalise the denominator $(2 + \sqrt{2})/(3 - \sqrt{3})$

$$(8 + 2\sqrt{3} + 3\sqrt{2})/6$$

Rationalise the denominator $1/(7 + \sqrt{6})$

$$(7 - \sqrt{6})/43$$

Solutions – Rationalising the Denominator (I)

Rationalise the denominator $2/(8 + \sqrt{4})$

$$(16 - 2\sqrt{4})/60$$

Rationalise the denominator $(3 + \sqrt{5})/(3 - \sqrt{5})$

$$(14 + 3\sqrt{5} + 3\sqrt{5})/4$$

Rationalise the denominator $8/(8 - \sqrt{4})$

$$(64 + 8\sqrt{4})/60$$

Rationalise the denominator $(1 + \sqrt{4})/(6 - \sqrt{6})$

$$(10 + \sqrt{6} + 6\sqrt{4})/30$$

Rationalise the denominator $(6 + \sqrt{2})/(8 - \sqrt{4})$

$$(50 + 6\sqrt{4} + 8\sqrt{2})/60$$

Rationalise the denominator $6/(3 - \sqrt{4})$

$$(18 + 6\sqrt{4})/5$$

Solutions – Rationalising the Denominator (J)

Rationalise the denominator $(4 + \sqrt{3})/(5 + \sqrt{6})$

$$(17 - 4\sqrt{6} + 5\sqrt{3})/19$$

Rationalise the denominator $8/(8 + \sqrt{5})$

$$(64 - 8\sqrt{5})/59$$

Rationalise the denominator $8/(6 + \sqrt{5})$

$$(48 - 8\sqrt{5})/31$$

Rationalise the denominator $(5 + \sqrt{6})/(5 - \sqrt{2})$

$$(31 + 5\sqrt{2} + 5\sqrt{6})/23$$

Rationalise the denominator $(1 + \sqrt{5})/(3 - \sqrt{6})$

$$(8 + \sqrt{6} + 3\sqrt{5})/3$$

Rationalise the denominator $9/(8 - \sqrt{3})$

$$(72 + 9\sqrt{3})/61$$