9 (viii) $\frac{3}{\sqrt{8}} + \frac{1}{\sqrt{2}}$

$= \frac{3}{\sqrt{2\times2\times2}} + \frac{1}{\sqrt{2}}$

$= \frac{3}{2\sqrt{2}} + \frac{1}{\sqrt{2}}$

$= \frac{3+2}{2\sqrt{2}}$

$= \frac{5}{2\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}}$

$= \frac{5\sqrt{2}}{2\times2}$

$= \frac{5}{4}\sqrt{2}$

9 (ix) $2\frac{\sqrt{3}}{3} - \frac{\sqrt{3}}{6}$

$= \frac{4\sqrt{3} - \sqrt{3}}{6}$

$= \frac{3\sqrt{3}}{6} = \frac{\sqrt{3}}{2}$

10 (i) $\frac{2}{3\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}}$

$= \frac{2\sqrt{3}}{3\times3}$

$= \frac{2}{9}\sqrt{3}$

10 (ii) $\frac{\sqrt{40}}{\sqrt{3}}$

$= \frac{\sqrt{40}}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}}$

$= \frac{\sqrt{40\times3}}{\sqrt{3\times3}}$

$= \frac{\sqrt{120}}{3} = \frac{\sqrt{2^2\times30}}{3} = \frac{2}{3}\sqrt{30}$

10 (iii) $\frac{3+\sqrt{2}}{4\sqrt{2}}$

$= \frac{3+\sqrt{2}}{4\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}}$

$= \frac{3\sqrt{2} + \sqrt{2\times2}}{4\sqrt{2\times2}}$

$= \frac{3\sqrt{2}+2}{4\times2}$

$= \frac{3\sqrt{2}+2}{8}$

10 (iv) $\frac{16}{\sqrt{41} - 5}$

$= \frac{16}{\sqrt{41}-5} \times \frac{\sqrt{41}+5}{\sqrt{41}+5}$

$= \frac{16(\sqrt{41}+5)}{(\sqrt{41})^2 - 5^2}$

$= \frac{16(\sqrt{41}+5)}{41-25}$

$= \frac{16(\sqrt{41}+5)}{16}$

$= \sqrt{41} + 5$