

$$1) \sqrt{36} = 6$$

$$2) \sqrt{40} = \frac{\sqrt{4} \cdot \sqrt{10}}{2\sqrt{10}}$$

$$3) \sqrt{98} = \frac{\sqrt{49} \cdot \sqrt{2}}{7\sqrt{2}}$$

$$4) \frac{2 \cdot \sqrt{4}}{2 \cdot 2} = \frac{4}{4}$$

$$5) \sqrt{72} = \frac{\sqrt{36} \cdot \sqrt{2}}{6\sqrt{2}}$$

$$6) \sqrt{64} = 8$$

$$7) \sqrt{63} = \frac{\sqrt{9} \cdot \sqrt{7}}{3\sqrt{7}}$$

$$8) \sqrt{48} = \frac{\sqrt{16} \cdot \sqrt{3}}{4\sqrt{3}} = 4\sqrt{3}$$

$$9) \frac{4 \cdot \sqrt{49}}{4 \cdot 7} = \frac{28}{28}$$

$$10) \frac{2\sqrt{12}}{2 \cdot 2 \cdot \sqrt{3}} = \frac{2 \cdot \sqrt{4} \cdot \sqrt{3}}{4\sqrt{3}}$$

$$11) \frac{5\sqrt{50}}{5 \cdot 5 \sqrt{2}} = \frac{5 \cdot \sqrt{25} \cdot \sqrt{2}}{25\sqrt{2}}$$

$$12) \frac{7\sqrt{4}}{7 \cdot 2} = \frac{14}{14}$$

$$13) \frac{\sqrt{28}}{2\sqrt{7}} = \frac{\sqrt{4} \cdot \sqrt{7}}{2\sqrt{7}}$$

$$18) \frac{5\sqrt{25}}{5 \cdot 5} = \frac{25}{25}$$

$$23) \frac{7\sqrt{4} \cdot \sqrt{2}}{7 \cdot 2 \sqrt{2}} = \frac{14\sqrt{2}}{14\sqrt{2}}$$

$$14) \frac{-3\sqrt{4}}{-3 \cdot 2} = \frac{-6}{-6}$$

$$19) \frac{\sqrt{32}}{4\sqrt{2}} = \frac{\sqrt{16} \cdot \sqrt{2}}{4\sqrt{2}}$$

$$20) 2\sqrt{6} = \text{CNS}$$

$$24) \frac{5\sqrt{4} \cdot \sqrt{5}}{5 \cdot 2 \sqrt{5}} = \frac{10\sqrt{5}}{10\sqrt{5}}$$

$$15) 10$$

$$21) \frac{\sqrt{100} \cdot \sqrt{7}}{10\sqrt{7}}$$

$$22) \frac{4 \cdot \sqrt{4} \cdot \sqrt{3}}{4 \cdot 2 \sqrt{3}} = \frac{8\sqrt{3}}{8\sqrt{3}}$$

$$25) \frac{3 \cdot \sqrt{81}}{3 \cdot 9} = \frac{27}{27}$$

$$16) \frac{\sqrt{25} \sqrt{3}}{5\sqrt{3}}$$

$$17) 1$$

$$26) \sqrt{x^2} = x$$

$$27) y^6$$

$$28) x^3$$

$$29) 5^{10}$$

$$30) a^5 b^3$$

Test Review

$$\sqrt{\frac{3}{15}} = \frac{\sqrt{1}}{\sqrt{5}} = \frac{1}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{\sqrt{5}}{5}$$

$$\frac{\sqrt{4}}{\sqrt{3}} = \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$

$$\sqrt{\frac{8}{12}} = \frac{\sqrt{2}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{6}}{3}$$

$$\frac{5\sqrt{3} + 4\sqrt{7}}{3\sqrt{3} + 4\sqrt{7}} = 2\sqrt{3}$$

$$\begin{aligned} &8\sqrt{3} + \sqrt{12} \\ &8\sqrt{3} + \sqrt{4 \cdot 3} \\ &8\sqrt{3} + 2\sqrt{3} \\ &10\sqrt{3} \end{aligned}$$

$$\sqrt{18} \cdot \sqrt{2} = \sqrt{36} = 6$$

$$\begin{aligned} &3\sqrt{2} \cdot \sqrt{50} \\ &3 \cdot \sqrt{100} \\ &3 \cdot 10 \\ &30 \end{aligned}$$

$$\frac{\sqrt{75}}{\sqrt{3}} = \sqrt{25} = 5$$

$$\begin{aligned} &\frac{\sqrt{28} - \sqrt{63}}{\sqrt{4} \cdot \sqrt{7} - \sqrt{9} \cdot \sqrt{7}} \\ &\frac{2\sqrt{7} - 3\sqrt{7}}{-1\sqrt{7}} \end{aligned}$$

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

$$\begin{aligned} &(\sqrt{5} + 2)(\sqrt{5} - 2) \\ &5 - \cancel{2\sqrt{5}} + \cancel{2\sqrt{5}} - 4 \\ &1 \end{aligned}$$