

## 1.2

$$1) \sqrt{6} \sqrt{5} = \sqrt{6 \cdot 5} = \sqrt{30}$$

$$2) \sqrt{8} \sqrt{3} = \sqrt{8 \cdot 3} = \sqrt{4 \cdot 2 \cdot 3} = \sqrt{4} \sqrt{2 \cdot 3} = 2 \sqrt{6}$$

$$3) \sqrt{2} \sqrt{40} = \sqrt{2 \cdot 40} = \sqrt{2 \cdot 2 \cdot 20} = 2 \sqrt{20} = 2 \sqrt{4 \cdot 5} = 2 \sqrt{4} \sqrt{5} \\ = 2 \cdot 2 \sqrt{5} = 4 \sqrt{5}$$

$$4) \sqrt{10} \sqrt{15} = \sqrt{10 \cdot 15} = \sqrt{2 \cdot 5 \cdot 3 \cdot 5} = 5 \sqrt{2 \cdot 3} = 5 \sqrt{6}$$

$$5) \sqrt{7} \sqrt{\frac{1}{7}} = \sqrt{7 \cdot \frac{1}{7}} = \sqrt{1} = 1$$

$$6) \sqrt{5} \sqrt{\frac{1}{35}} = \sqrt{5 \cdot \frac{1}{35}} = \sqrt{\frac{1}{7}} = \frac{\sqrt{1}}{\sqrt{7}} = \frac{1}{\sqrt{7}} = \frac{1 \cdot \sqrt{7}}{\sqrt{7} \cdot \sqrt{7}} = \frac{\sqrt{7}}{7}$$

$$7) \sqrt{\frac{1}{3}} \sqrt{\frac{7}{2}} = \sqrt{\frac{1}{3} \cdot \frac{7}{2}} = \sqrt{\frac{7}{6}} = \frac{\sqrt{7}}{\sqrt{6}} = \frac{\sqrt{7} \cdot \sqrt{6}}{\sqrt{6} \cdot \sqrt{6}} = \frac{\sqrt{42}}{6}$$

$$8) \sqrt{\frac{1}{15}} \sqrt{\frac{5}{6}} = \sqrt{\frac{1}{15} \cdot \frac{5}{6}} = \sqrt{\frac{1}{3} \cdot \frac{1}{6}} = \sqrt{\frac{1}{18}} = \frac{\sqrt{1}}{\sqrt{18}} = \frac{1}{\sqrt{9 \cdot 2}} = \frac{1}{3 \sqrt{2}} \\ = \frac{1 \cdot \sqrt{2}}{3 \sqrt{2} \cdot \sqrt{2}} = \frac{\sqrt{2}}{3 \cdot 2} = \frac{\sqrt{2}}{6}$$

$$9) \sqrt{\frac{4}{3}} \sqrt{\frac{27}{16}} = \sqrt{\frac{4}{3} \cdot \frac{27}{16}} = \sqrt{\frac{1}{1} \cdot \frac{9}{4}} = \sqrt{\frac{9}{4}} = \frac{\sqrt{9}}{\sqrt{4}} = \frac{3}{2}$$

$$10) \sqrt{\frac{1}{25}} \sqrt{\frac{144}{49}} = \frac{\sqrt{1}}{\sqrt{25}} \cdot \frac{\sqrt{144}}{\sqrt{49}} = \frac{1}{5} \cdot \frac{12}{7} = \frac{12}{35}$$

$$11) \sqrt{32} \sqrt{\frac{1}{72}} = \sqrt{32 \cdot \frac{1}{72}} = \sqrt{4 \cdot \frac{1}{9}} = \sqrt{\frac{4}{9}} = \frac{\sqrt{4}}{\sqrt{9}} = \frac{2}{3}$$

$$12) \sqrt{\frac{28}{5}} \sqrt{\frac{35}{4}} = \sqrt{\frac{28}{5} \cdot \frac{35}{4}} = \sqrt{\frac{7}{1} \cdot \frac{7}{1}} = \sqrt{49} = 7$$