

1) Vereinfache und berechne:

1a:
$$\frac{\sqrt{21}}{\sqrt{20}} = \frac{\sqrt{7}}{\sqrt{15}}$$

1b:
$$\frac{\sqrt{8}}{\sqrt{9}} = \frac{\sqrt{50}}{\sqrt{81}}$$

1c:
$$\frac{\sqrt{\frac{1}{3}}}{\sqrt{\frac{3}{4}}} =$$

1d:
$$\frac{\sqrt{\frac{35}{3}}}{\sqrt{10} \cdot \sqrt{\frac{7}{5}}} =$$

1e:
$$\sqrt{\sqrt{27}} \cdot \sqrt{\sqrt{8}} \cdot \sqrt{\sqrt{2}} \cdot \sqrt{\sqrt{3}} =$$

2) Mache den Nenner rational und vereinfache:

2a:
$$\frac{1}{\sqrt{2}} =$$

2b:
$$\frac{4}{\sqrt{6}} =$$

2c:
$$\frac{\sqrt{6}}{\sqrt{5}} =$$

2d:
$$\frac{\sqrt{15}}{\sqrt{2} \cdot \sqrt{3}} =$$

2e:
$$\frac{8 \cdot \sqrt{5}}{\sqrt{8}} =$$