

# Produkte u. Quotienten v. Quadratwurzeln

Arbeitsblatt

| $x$ | $y$ | $\sqrt{x \cdot y}$                    | $\sqrt{x} \cdot \sqrt{y}$                   |
|-----|-----|---------------------------------------|---------------------------------------------|
| 9   | 16  | $\sqrt{9 \cdot 16} = \sqrt{144} = 12$ | $\sqrt{9} \cdot \sqrt{16} = 3 \cdot 4 = 12$ |
| 1   | 4   |                                       |                                             |
| 4   | 36  |                                       |                                             |
| 16  | 25  |                                       |                                             |
| 9   | 64  |                                       |                                             |
| 49  | 100 |                                       |                                             |

$$\sqrt{4 \cdot 25} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \sqrt{4} \cdot \sqrt{25} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\sqrt{9 \cdot 49} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \sqrt{9} \cdot \sqrt{49} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

| $x$ | $y$ | $\sqrt{\frac{x}{y}}$                                                     | $\frac{\sqrt{x}}{\sqrt{y}}$                                                            |
|-----|-----|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 9   | 16  | $\sqrt{\frac{9}{16}} = \sqrt{\frac{3 \cdot 3}{4 \cdot 4}} = \frac{3}{4}$ | $\frac{\sqrt{9}}{\sqrt{16}} = \frac{\sqrt{3 \cdot 3}}{\sqrt{4 \cdot 4}} = \frac{3}{4}$ |
| 1   | 4   |                                                                          |                                                                                        |
| 4   | 36  |                                                                          |                                                                                        |
| 16  | 25  |                                                                          |                                                                                        |
| 9   | 64  |                                                                          |                                                                                        |
| 49  | 100 |                                                                          |                                                                                        |

$$\sqrt{\frac{16}{49}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\sqrt{\frac{100}{121}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$