

## Berechne

$$\text{a) } \binom{5}{3} = \frac{5!}{3! \cdot 2!} = \frac{5 \cdot 4}{2} = 10$$

$$\text{b) } \binom{6}{4} = \frac{6!}{4! \cdot 2!} = \frac{6 \cdot 5}{2} = 15$$

$$\text{c) } \binom{6}{0} = 1$$

$$\text{d) } \binom{3}{2} = \frac{3!}{2! \cdot 1!} = 3$$

$$\text{e) } \binom{5}{5} = 1$$

$$\text{f) } \binom{10}{7} = \frac{10!}{7! \cdot 3!} = \frac{10 \cdot 9 \cdot 8}{3 \cdot 2} = 120$$

$$\text{g) } \binom{4}{2} = \frac{4!}{2! \cdot 2!} = \frac{4 \cdot 3}{2} = 6$$

$$\text{h) } \binom{70}{69} = \frac{70!}{69! \cdot 1!} = 70$$

$$\text{i) } \binom{8}{3} = \frac{8!}{3! \cdot 5!} = \frac{8 \cdot 7 \cdot 6}{3 \cdot 2} = 56$$

$$\text{j) } \binom{6}{1} = \frac{6!}{1! \cdot 5!} = 6$$

$$\text{k) } \binom{100}{98} = \frac{100!}{98! \cdot 2!} = \frac{100 \cdot 99}{2} = 4950$$

$$\text{l) } \binom{10}{9} = \frac{10!}{9! \cdot 1!} = 10$$