

### Pascal's Triangle, with evaluated combination notation

$$\begin{pmatrix} 1 \\ 0 \end{pmatrix} = \mathbf{1} \quad \begin{pmatrix} 1 \\ 1 \end{pmatrix} = \mathbf{1}$$

$$\begin{pmatrix} 2 \\ 0 \end{pmatrix} = \mathbf{1} \quad \begin{pmatrix} 2 \\ 1 \end{pmatrix} = \mathbf{2} \quad \begin{pmatrix} 2 \\ 2 \end{pmatrix} = \mathbf{1}$$

$$\binom{3}{0} = 1 \quad \binom{3}{1} = 3 \quad \binom{3}{2} = 3 \quad \binom{3}{3} = 1$$

$$\binom{4}{0} = 1 \quad \binom{4}{1} = 4 \quad \binom{4}{2} = 6 \quad \binom{4}{3} = 4 \quad \binom{4}{4} = 1$$

$$\binom{5}{0} = 1 \quad \binom{5}{1} = 5 \quad \binom{5}{2} = 10 \quad \binom{5}{3} = 10 \quad \binom{5}{4} = 5 \quad \binom{5}{5} = 1$$

$$\binom{6}{0} = 1 \quad \binom{6}{1} = 6 \quad \binom{6}{2} = 15 \quad \binom{6}{3} = 20 \quad \binom{6}{4} = 15 \quad \binom{6}{5} = 6 \quad \binom{6}{6} = 1$$

$$\binom{7}{0} = 1 \quad \binom{7}{1} = 7 \quad \binom{7}{2} = 21 \quad \binom{7}{3} = 35 \quad \binom{7}{4} = 35 \quad \binom{7}{5} = 21 \quad \binom{7}{6} = 7 \quad \binom{7}{7} = 1$$

$$\binom{8}{0} = 1 \quad \binom{8}{1} = 8 \quad \binom{8}{2} = 28 \quad \binom{8}{3} = 56 \quad \binom{8}{4} = 70 \quad \binom{8}{5} = 56 \quad \binom{8}{6} = 28 \quad \binom{8}{7} = 8 \quad \binom{8}{8} = 1$$

$$\binom{9}{0} = 1 \quad \binom{9}{1} = 9 \quad \binom{9}{2} = 36 \quad \binom{9}{3} = 84 \quad \binom{9}{4} = 126 \quad \binom{9}{5} = 126 \quad \binom{9}{6} = 84 \quad \binom{9}{7} = 36 \quad \binom{9}{8} = 9 \quad \binom{9}{9} = 1$$

$$\binom{10}{0} = 1 \quad \binom{10}{1} = 10 \quad \binom{10}{2} = 45 \quad \binom{10}{3} = 120 \quad \binom{10}{4} = 210 \quad \binom{10}{5} = 252 \quad \binom{10}{6} = 210 \quad \binom{10}{7} = 120 \quad \binom{10}{8} = 45 \quad \binom{10}{9} = 10 \quad \binom{10}{10} = 1$$