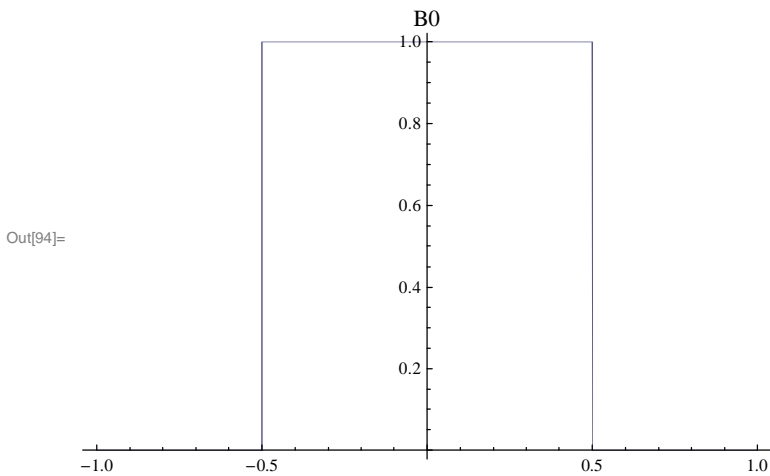


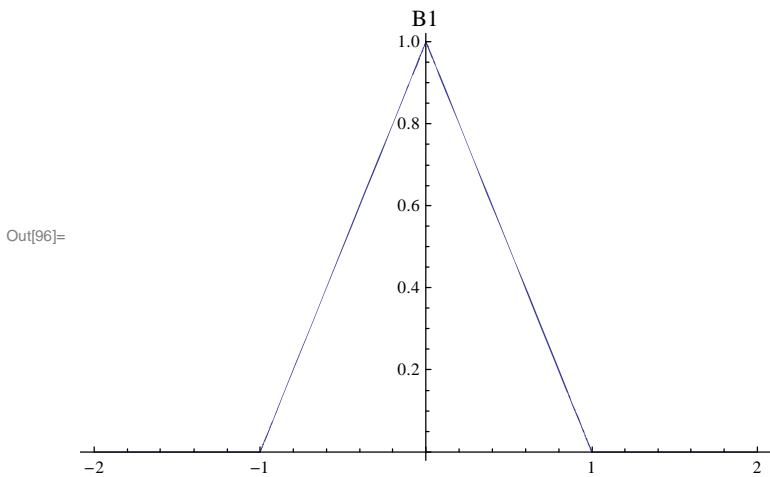
In[94]:= `Plot[BSplineBasis[0, x + 1 / 2], {x, -1, 1}, PlotLabel -> B0]`



In[95]:= `PiecewiseExpand[BSplineBasis[0, x + 1 / 2]]`

Out[95]=
$$\begin{cases} 1 & -\frac{1}{2} \leq x \leq \frac{1}{2} \\ 0 & \text{True} \end{cases}$$

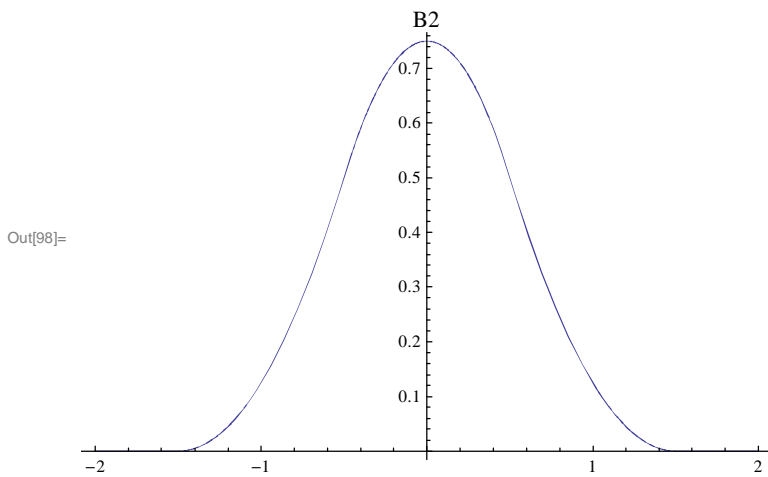
In[96]:= `Plot[BSplineBasis[1, x / 2 + 1 / 2], {x, -2, 2}, PlotLabel -> B1]`



In[97]:= `PiecewiseExpand[BSplineBasis[1, x / 2 + 1 / 2]]`

Out[97]=
$$\begin{cases} 1 - x & 0 \leq x \leq 1 \\ 1 + x & -1 \leq x < 0 \\ 0 & \text{True} \end{cases}$$

In[98]:= `Plot[BSplineBasis[2, x / 3 + 1 / 2], {x, -2, 2}, PlotLabel -> B2]`

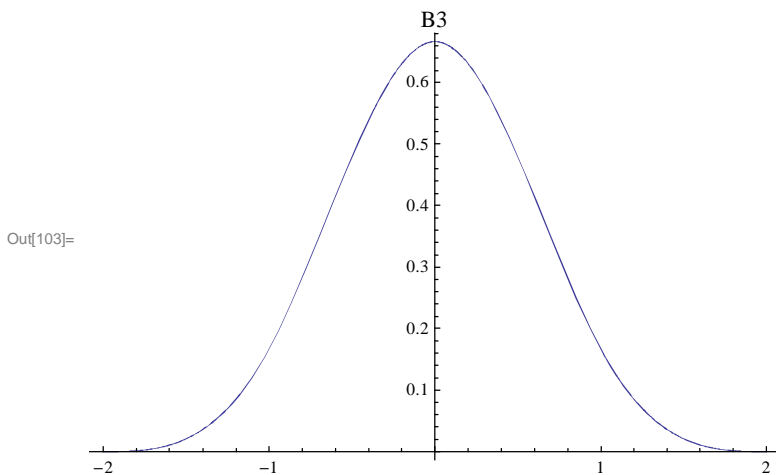


In[99]:= `PiecewiseExpand[BSplineBasis[2, x / 3 + 1 / 2]]`

Out[99]=

$$\begin{cases} \frac{1}{4} (3 - 4x^2) & -\frac{1}{2} \leq x < \frac{1}{2} \\ \frac{1}{8} (9 - 12x + 4x^2) & \frac{1}{2} \leq x \leq \frac{3}{2} \\ \frac{1}{8} (9 + 12x + 4x^2) & -\frac{3}{2} \leq x < -\frac{1}{2} \\ 0 & \text{True} \end{cases}$$

In[103]:= `Plot[BSplineBasis[3, x / 4 + 1 / 2], {x, -2, 2}, PlotLabel -> B3]`



In[104]:= `PiecewiseExpand[BSplineBasis[3, x / 4 + 1 / 2]]`

Out[104]=

$$\begin{cases} \frac{1}{6} (4 - 6x^2 - 3x^3) & -1 \leq x < 0 \\ \frac{1}{6} (8 - 12x + 6x^2 - x^3) & 1 \leq x \leq 2 \\ \frac{1}{6} (8 + 12x + 6x^2 + x^3) & -2 \leq x < -1 \\ \frac{1}{6} (4 - 6x^2 + 3x^3) & 0 \leq x < 1 \\ 0 & \text{True} \end{cases}$$