

## Corrigé de l'activité 2

1.-  $(x+1)^2 = x^2 + 2x + 1$

Donc  $x^2 + 2x = (x+1)^2 - 1$

2.-  $(x + \frac{3}{2})^2 = x^2 + 2 \cdot \frac{3}{2} \cdot x + (\frac{3}{2})^2 = x^2 + 3x + \frac{9}{4}$

Donc  $x^2 + 3x = (x + \frac{3}{2})^2 - \frac{9}{4}$

3.-  $2x^2 + 3x = 2(x^2 + \frac{3}{2}x)$

$x^2 + 3x = (x + \frac{3}{2})^2 - \frac{9}{4}$  donc  $x^2 + \frac{3}{2}x = (x + \frac{3}{4})^2 - \frac{9}{16}$

Et  $2(x^2 + \frac{3}{2}x) = 2[(x + \frac{3}{4})^2 - \frac{9}{16}]$

Donc  $2x^2 + 3x = 2[(x + \frac{3}{4})^2 - (\frac{3}{4})^2]$

4.-  $f(x) = x^2 + 3x - 4$

Alors  $f(x) = (x + \frac{3}{2})^2 - \frac{9}{4} - 4 = (x + \frac{3}{2})^2 - \frac{9}{4} - \frac{16}{4}$

Ainsi  $f(x) = (x + \frac{3}{2})^2 - (\frac{5}{2})^2$