**FOIL**

Given the expression \((y + 2)(y - 3)\)

- **First**
  - Multiply the first terms from both sets of brackets.
  - \((y + 2)(y - 3)\)
  - y \(\times\) y = \(y^2\)

- **Outside**
  - Multiply the outside terms from the two sets of brackets.
  - \((y + 2)(y - 3)\)
  - y \(\times\) (-3) = \(-3y\)

- **Inside**
  - Multiply the inside terms from the two sets of brackets.
  - \((y + 2)(y - 3)\)
  - (+2) \(\times\) y = \(2y\)

- **Last**
  - Multiply the last terms from both sets of brackets.
  - \((y + 2)(y - 3)\)
  - (+2) \(\times\) (-3) = \(-6\)

**Put it all together**

\((y + 2)(y - 3)\)

\(= y^2 - 3y + 2y - 6\)

\(= y^2 - y - 6\)