

**Regions of the Cartesian Plane****Graph**

1)  $y \geq 2(x + 1)^2 - 3$

4)  $2x - y \geq 0$

2)  $y < 2(x - 1)(x + 2)$

5)  $x > 4$

3)  $-2x^2 - 2x + 4 > -y$

6)  $-y + 3 < 0$

## Properties of a function

Determine the solutions of the inequality.

1)  $2 \geq 2(x + 1)^2 - 1$

2)  $0 < 2(x - 1)(x + 2)$

3)  $2x^2 + 4x > -2$

4)  $2(x + 2)(x - 2) \geq 24$

5)  $4 < -2x^2 + 6$

6)  $2x^2 - 3x + 6 > 6$