6 The quadratic graph $y = f(x)$ has a maximum turning point at (2, 3)

6 (a) Ed claims that $f(x)$ has the form

$$f(x) = 3 - a(x + 2)^2$$

where $a > 0$

Explain why Ed's claim is incorrect.

[1 mark]

6 (b) Nick correctly states that $f(x)$ has the form

$$f(x) = px^2 + qx + r$$

where p, q and r are constants.

Deduce the range of possible values for p

[1 mark]