Quadratics Overview (16/6/21)

Q1 [Practice/E]

Find the turning points of the following quadratic functions (without differentiating)

(i) $y = x^2 + x - 2$

(ii) $s = 10t - 5t^2$

(iii) $s = 1 + 10t - 5t^2$

Q2 [Practice/M]

Factorise $15x^2 + 34x + 16$

Q3 [Practice/E]

Derive the quadratic formula for the equation

$ax^2 + bx + c = 0$, by completing the square

Q4 [Practice/E]

For what value of x does $(x + 2)(x + 4)$ have its minimum value?

Q5 [Practice/E]

Find k if $y = kx + 1$ touches $y = x^2 + 2x + 3$