



1. Consider $f(x) = \sqrt{2x - 1}$,

(a) Find: (3 marks)

i. $f(20)$

ii. $f(5)$

iii. $f\left(\frac{1}{2}\right)$

(b) Find the values of x for which f is non-real. (2 marks)

(c) Find the domain and range of $f(x)$. (2 marks)

Mark scheme:

(a) i. $\sqrt{39}$ (A1)

ii. 3 (A1)

iii. 0 (A1)

(b) $2x - 1 < 0$ (M1)

$x < \frac{1}{2}$ (A1)

(c) Domain: $x \geq \frac{1}{2}$ (A1)

Range: $y \geq 0$ (A1)