

Quiz 4

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Question 1 What is the domain of the function $f(x) = \sqrt{x-1}$?

A $[1, \infty)$

B $(-\infty, 1]$

C $[0, 1]$

D \mathbb{R}

Question 2 Which of the following intervals satisfies the inequality $x^2 + 8x + 12 > 0$?

A $(-\infty, 2) \cup (6, \infty)$

B $(-2, -6)$

C $(-\infty, -2) \cup (-6, \infty)$

D $(-\infty, -2) \cup (-\infty, 6]$

Question 3 Write the polynomial $y = x^2 - 12x + 27$ in the form $y = a(x-h)^2 + k$ for a, h and k positive real numbers.

A $y = (x-3)^2 + 18$

B $y = (x+3)^2 + 18$

C $y = (x-3)^2$

D $y = (x+3)^2 + 9$

Question 4 What is the inverse function of the function $y = \frac{6x-4}{x-8}$?

A $y = \frac{4x+8}{6-2x}$

B $y = \frac{8x-4}{x-6}$

C $y = \frac{6x-4}{x-8}$

D $y = \frac{6x+4}{x+6}$