

Brett Robbins Academic Consulting

Mathematics 10C Practice Test

Unit 4: Relations and Functions

5 Questions

Original practice questions written to the Alberta curriculum, in the style of past diploma examinations. Work through each question, then check your answers with the key at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, contact Brett for clarification.

Question 1

Which set of ordered pairs represents a function?

- A) $\{(2, 5), (3, 5), (4, 5), (5, 5)\}$
- B) $\{(1, 3), (1, 4), (2, 6), (3, 8)\}$
- C) $\{(0, 1), (0, 2), (0, 3), (0, 4)\}$
- D) $\{(-2, 7), (-2, -7), (3, 7), (4, 7)\}$

Question 2

The domain of the relation $\{(-3, 4), (0, -1), (2, 4), (5, 7)\}$ is

- A) $\{-1, 4, 7\}$
- B) $\{-3, -1, 0, 2\}$
- C) $\{-3, 0, 2, 4, 5\}$
- D) $\{-3, 0, 2, 5\}$

Question 3

The range of the relation $\{(1, -2), (3, 0), (3, 5), (6, -2)\}$ is

- A) $\{1, 3, 6\}$
- B) $\{-2, 0, 3, 5\}$
- C) $\{-2, 0, 5\}$
- D) $\{0, 5, 6\}$

Question 4

If $f(x) = 3x - 5$, then $f(4)$ is

- A) 2
- B) 12
- C) 17
- D) 7

Question 5

The vertical line test states that a graph represents a function if every vertical line drawn on the graph intersects the graph

- A) At most once
- B) Exactly once
- C) At least once
- D) More than once

Answer Key

- | | | |
|------|------|------|
| 1. A | 3. C | 5. A |
| 2. D | 4. D | |

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