

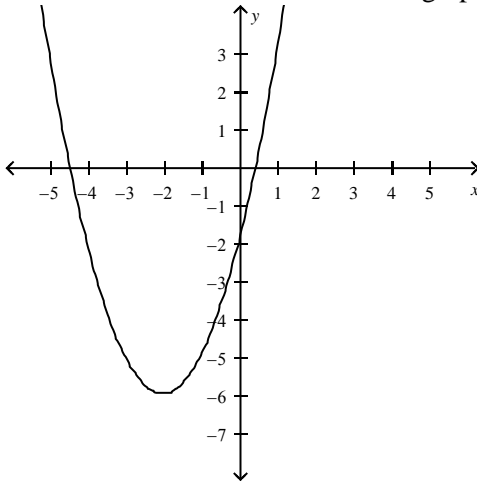
RF2 quadratic functions quiz #2 Review

Name: _____

Multiple Choice: *Identify the choice that best completes the statement or answers the question.* **Date:** _____

- _____ 1. Which description of a graph appears to represent a quadratic function?
- a. a line straight up and down
 - b. an ellipse
 - c. a parabola opening up
 - d. a parabola opening to the right

- _____ 2. Which set of data is correct for this graph?



Set	Axis of Symmetry	Vertex	Domain	Range
A.	$x = -2$	$(-2, 6)$	$x \in \mathbf{R}$	$y \in \mathbf{R}$
B.	$x = -6$	$(-6, -2)$	$-8 \leq x \leq 4$	$-8 \leq y$
C.	$x = -2$	$(-2, -6)$	$x \in \mathbf{R}$	$-6 \leq y$
D.	$x = 2$	$(2, 6)$	$-6 \leq x \leq 2$	$-6 \leq y$

- a. Set A.
 - b. Set B.
 - c. Set D.
 - d. Set C.
- _____ 3. What is the degree of a quadratic function?
- a. 3
 - b. 2
 - c. 0
 - d. 1
- _____ 4. What is the y-intercept for $y = 5x^2 + 3x + 3$?
- a. -5
 - b. 5
 - c. 2
 - d. 3

_____ 5. Which parabola opens upward?

- a. $y = 2x - 4x^2 - 5$
- b. $y = 2 + 4x - 5x^2$
- c. $y = 4 - 2x^2 - 5x$
- d. $y = -5x + 4x^2 + 2$

_____ 6. Which set of ordered pairs satisfy the function $f(x) = x^2 - 4x + 6$?

- a. $(-2, 18), (-1, 9), (6, 18)$
- b. $(2, 2), (4, 6), (7, 30)$
- c. $(-3, 27), (0, 6), (5, 11)$
- d. $(-1, 9), (1, 3), (2, 2)$

Short Answer

7. Make a table of values, then sketch the graph of the relation $y = x^2 + 2x + 11$.

Problem

8. The height of a golf ball above the ground, y , in metres, is modelled by the function $y = -4.9x^2 + 10x$, where x is the time in seconds after the ball is hit.

- a) Use technology to determine the maximum height the ball will reach. Round your answer to the nearest tenth of a metre.
- b) State any restrictions on the domain and range of the function.
- c) For how long is the ball in the air?

Multiple Choice Answers: 1. C 2. D 3. B 4. D 5. D 6. C
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Answer Section

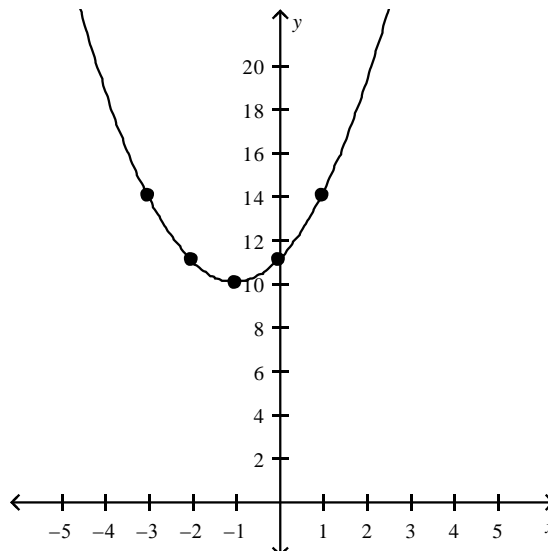
MULTIPLE CHOICE

- | | | | |
|-----------|--------|---------------|-----------------|
| 1. ANS: C | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.1 |
| 2. ANS: D | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.2 |
| 3. ANS: B | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.1 |
| 4. ANS: D | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.1 |
| 5. ANS: D | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.1 |
| 6. ANS: C | PTS: 1 | DIF: Grade 11 | REF: Lesson 7.2 |

SHORT ANSWER

7. ANS:

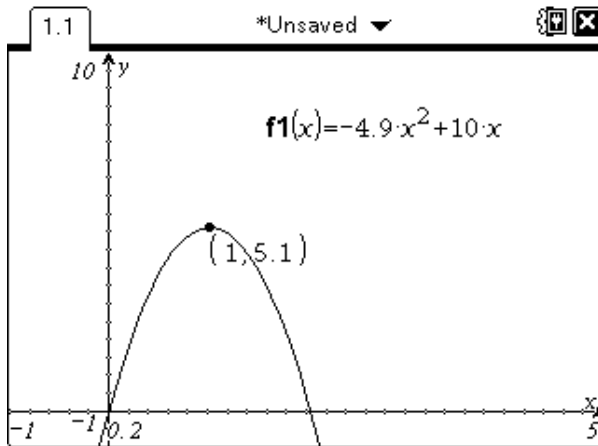
x	y
-3	14
-2	11
-1	10
0	11
1	14



PROBLEM

8. ANS:

a)



b) $0 \leq x \leq 2, 0 \leq y \leq 5.1$

c) 2.0 s