Lesson 3.6 Practice: Quadratic Models

School Launch · Algebra II · Unit 3: Quadratic Functions and Complex Numbers · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the quadratic $y = ax^2 + bx + c$ through $(-3, -42)$, $(0, -3)$, $(4, -35)$. EASY

2. Find the quadratic $y = ax^2 + bx + c$ through $(-3, -1)$, $(4, -22)$, $(-2, 2)$. EASY

3. Find the quadratic $y = ax^2 + bx + c$ through $(-3, -42)$, $(-1, -4)$, $(2, 8)$. EASY

4. Find the quadratic $y = ax^2 + bx + c$ through $(2, -13)$, $(1, -2)$, $(-1, 8)$. MEDIUM

5. Find the quadratic $y = ax^2 + bx + c$ through $(0, 6)$, $(-3, -21)$, $(1, 7)$. MEDIUM

6. Find the quadratic $y = ax^2 + bx + c$ through $(1, -2)$, $(-2, -5)$, $(3, -10)$. MEDIUM

7. Find the quadratic $y = ax^2 + bx + c$ through $(0, -6)$, $(2, -28)$, $(3, -45)$. MEDIUM

8. Find the quadratic $y = ax^2 + bx + c$ through $(0, 4)$, $(1, -2)$, $(4, -32)$. HARD

9. Find the quadratic $y = ax^2 + bx + c$ through $(-2, -5)$, $(-1, -7)$, $(0, -7)$. HARD

10. Find the quadratic $y = ax^2 + bx + c$ through $(-2, 24)$, $(4, 30)$, $(-1, 10)$. HARD