Lesson 4.1 Practice: The Coordinate Plane and Relations

School Launch · Algebra I · Unit 4: Relations and Functions · Worksheet A

No calculator

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. Is the relation $\{(3, -5), (-6, 6), (4, 5), (-5, 3)\}$ a function? Give its domain. EASY

2. Name the quadrant of each point: $(-4, 5)$, $(-8, 3)$. EASY

3. Is the relation $\{(-3, 2), (-3, 6), (-4, -3), (5, -6)\}$ a function? Give its domain. EASY

4. Name the quadrant of each point: $(1, -9)$, $(1, 4)$, $(4, -3)$. MEDIUM

5. Is the relation $\{(3, -2), (-3, 6), (4, 2), (3, 1), (1, 3)\}$ a function? Give its domain. MEDIUM

6. Name the quadrant of each point: $(-4, 6)$, $(9, -8)$, $(8, 3)$. MEDIUM

7. Is the relation $\{(-3, -5), (-6, 1), (6, -2), (1, -5), (5, -6)\}$ a function? Give its domain. MEDIUM

8. Name the quadrant of each point: $(-2, 4)$, $(-7, 8)$, $(6, -1)$, $(-8, -1)$. HARD

9. Is the relation $\{(5, -3), (-4, -2), (2, -6), (3, -1), (5, -4), (-3, 2)\}$ a function? Give its domain. HARD

10. Name the quadrant of each point: $(-1, -6)$, $(4, 2)$, $(-2, -4)$, $(5, 8)$. HARD