Lesson 5.3 Practice: Medians, Altitudes and the Centroid

School Launch · Geometry · Unit 5: Relationships Within Triangles · Worksheet A

Calculator allowed

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. In $\triangle ABC$, median $\overline{AD}$ has length 45. G is the centroid. Find AG and GD. EASY

2. In $\triangle ABC$, median $\overline{AD}$ has length 39. G is the centroid. Find AG and GD. EASY

3. In $\triangle ABC$, median $\overline{AD}$ has length 33. G is the centroid. Find AG and GD. EASY

4. Find the centroid of the triangle with vertices $(8, -5)$, $(0, 9)$, $(-5, 8)$. MEDIUM

5. Find the centroid of the triangle with vertices $(9, 9)$, $(0, 2)$, $(-3, -2)$. MEDIUM

6. Find the centroid of the triangle with vertices $(4, 0)$, $(6, -3)$, $(-4, 3)$. MEDIUM

7. Find the centroid of the triangle with vertices $(4, 6)$, $(-3, -7)$, $(-4, 4)$. MEDIUM

8. Find the centroid of the triangle with vertices $(-1, 1)$, $(0, 6)$, $(7, -7)$. HARD

9. Find the centroid of the triangle with vertices $(9, 5)$, $(3, -8)$, $(-9, -6)$. HARD

10. Find the centroid of the triangle with vertices $(6, 0)$, $(2, 1)$, $(-8, -7)$. HARD