Lesson 13.1 Practice: Coordinate Tools: Distance, Midpoint, Slope and Partitions

School Launch · Geometry · Unit 13: Coordinate Geometry and Proof · 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. Find the point that partitions $\overline{AB}$ from $A(-5, -3)$ to $B(10, 6)$ in the ratio $2 : 2$. EASY

2. Find the distance and the midpoint between $(4, 5)$ and $(12, 20)$. EASY

3. Find the point that partitions $\overline{AB}$ from $A(-8, -3)$ to $B(10, 6)$ in the ratio $4 : 4$. EASY

4. Find the distance and the midpoint between $(-2, 3)$ and $(3, -1)$. MEDIUM

5. Find the point that partitions $\overline{AB}$ from $A(-6, -5)$ to $B(11, 6)$ in the ratio $3 : 4$. MEDIUM

6. Find the distance and the midpoint between $(-5, 7)$ and $(-4, 11)$. MEDIUM

7. Find the point that partitions $\overline{AB}$ from $A(-6, -4)$ to $B(11, 10)$ in the ratio $1 : 2$. MEDIUM

8. A right triangle has legs 2 and 2 inches. Find the hypotenuse in simplest radical form. HARD

9. Find the point that partitions $\overline{AB}$ from $A(-8, 4)$ to $B(12, 7)$ in the ratio $4 : 3$. HARD

10. A right triangle has legs 6 and 7 inches. Find the hypotenuse in simplest radical form. HARD