Lesson 2.5 Practice: Basic Constructions

School Launch · Geometry · Unit 2: Points, Lines, Planes and Angles · 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. You bisect a 22 cm segment with compass and straightedge. How long is each half? What is the least compass opening you may use? EASY

2. You bisect a 12 cm segment with compass and straightedge. How long is each half? What is the least compass opening you may use? EASY

3. You bisect a 16 cm segment with compass and straightedge. How long is each half? What is the least compass opening you may use? EASY

4. An angle of 122° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. MEDIUM

5. An angle of 167° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. MEDIUM

6. An angle of 63° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. MEDIUM

7. An angle of 68° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. MEDIUM

8. An angle of 102° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. HARD

9. An angle of 138° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. HARD

10. An angle of 128° is bisected, and then one of the halves is bisected again. Find the measure of each of the smallest angles. HARD