Lesson 2.4 Practice: Angle Pairs and the Vertical Angles Theorem

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. Two angles are vertical angles. One measures 21°. Find the other. EASY

2. Two angles are vertical angles. One measures 20°. Find the other. EASY

3. Two angles are complementary. One measures 74°. Find the other. EASY

4. Two supplementary angles measure $(4x - 5)^\circ$ and $(4x + 129)^\circ$. Find x and both angles. MEDIUM

5. Two supplementary angles measure $(3x + 14)^\circ$ and $(1x + 122)^\circ$. Find x and both angles. MEDIUM

6. Vertical angles measure $(1x + 15)^\circ$ and $(2x - 2)^\circ$. Find x and the angle. MEDIUM

7. Vertical angles measure $(3x + 10)^\circ$ and $(4x - 8)^\circ$. Find x and the angle. MEDIUM

8. Two complementary angles measure $(3x + 3)^\circ$ and $(1x + 15)^\circ$. Find x and both angles. HARD

9. Two complementary angles measure $(1x + 4)^\circ$ and $(2x + 59)^\circ$. Find x and both angles. HARD

10. Two complementary angles measure $(3x + 5)^\circ$ and $(3x - 17)^\circ$. Find x and both angles. HARD