Lesson 4.1 Practice: Triangle Angle Sum and Exterior Angles

School Launch · Geometry · Unit 4: Triangles and Congruence · 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 of a triangle measure 61° and 56°. Find the third angle and the exterior angle at that vertex. EASY

2. Two angles of a triangle measure 30° and 67°. Find the third angle and the exterior angle at that vertex. EASY

3. Two angles of a triangle measure 83° and 46°. Find the third angle and the exterior angle at that vertex. EASY

4. The angles of a triangle measure $(2x + 2)^\circ$, $(3x - 3)^\circ$ and $(1x + 121)^\circ$. Find x and the largest angle.

MEDIUM

5. The angles of a triangle measure $(1x + 15)^\circ$, $(4x + 11)^\circ$ and $(1x + 70)^\circ$. Find x and the largest angle.

MEDIUM

6. The angles of a triangle measure $(3x - 4)^\circ$, $(3x + 10)^\circ$ and $(1x + 132)^\circ$. Find x and the largest angle.

MEDIUM

7. The angles of a triangle measure $(2x + 1)^\circ$, $(2x + 10)^\circ$ and $(1x + 144)^\circ$. Find x and the largest angle.

MEDIUM

8. The angles of a triangle measure $(4x - 5)^\circ$, $(2x + 8)^\circ$ and $(2x + 73)^\circ$. Find x and the largest angle. HARD

9. The angles of a triangle measure $(3x - 2)^\circ$, $(2x - 5)^\circ$ and $(4x + 70)^\circ$. Find x and the largest angle. HARD

10. The angles of a triangle measure $(1x + 8)^\circ$, $(3x + 4)^\circ$ and $(4x + 88)^\circ$. Find x and the largest angle. HARD