Lesson 12.2 Practice: Triangles and Polygons

School Launch · Pre-Algebra · Unit 12: Geometry · Worksheet A

No calculator

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 $43°$ and $46°$. Find the third angle and the exterior angle at that vertex. EASY

2. Find the sum of the interior angles of a 11-gon and each interior angle if it is regular (nearest tenth). EASY

3. Two angles of a triangle measure $32°$ and $47°$. Find the third angle and the exterior angle at that vertex. EASY

4. Each exterior angle of a regular polygon measures $30°$. How many sides does it have, and what is each interior angle? MEDIUM

5. The angles of a triangle measure $(1x + 14)°$, $(4x + 0)°$ and $(3x + 118)°$. Find x and the largest angle.

MEDIUM

6. Each exterior angle of a regular polygon measures $8°$. How many sides does it have, and what is each interior angle? MEDIUM

7. The angles of a triangle measure $(3x + 10)°$, $(1x + 9)°$ and $(4x + 57)°$. Find x and the largest angle.

MEDIUM

8. Each exterior angle of a regular polygon measures $2°$. How many sides does it have, and what is each interior angle? HARD

9. The angles of a triangle measure $(3x + 3)°$, $(4x + 11)°$ and $(4x + 78)°$. Find x and the largest angle.

HARD

10. Each exterior angle of a regular polygon measures $20°$. How many sides does it have, and what is each interior angle? HARD