LESSON MAKER PRO

Triangle Angle Hunt

Find the missing angle in each triangle.

GRADE 6 · 6.GM.3.2

6.GM.3.2 "Develop and use the fact that the sum of the interior angles of a triangle is 180̊ to determine missing angle measures in a triangle."

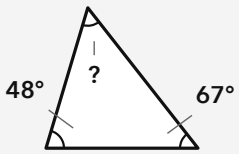
NAME _____ DATE _____

THE ANGLE SUM

The three inside angles of a triangle add to 180°. To find a missing angle, add the two known angles, then subtract their sum from 180°.

WORKED EXAMPLE

Find the angle marked ?.

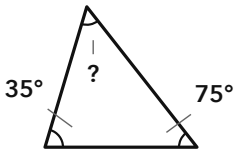


1. Add the known angles: 48° + 67° = 115°.
2. Subtract from 180°: 180° - 115° = 65°.

Answer: 65°

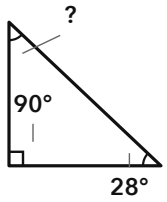
PRACTICE 6 problems

1 Find the angle marked ?.



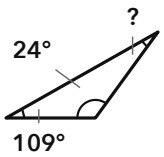
ANSWER _____

2 Find the angle marked ?.



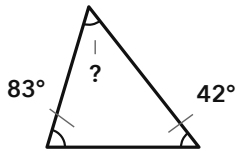
ANSWER _____

3 Find the angle marked ?.



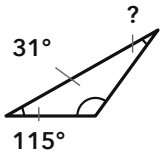
ANSWER _____

4 Find the angle marked ?.



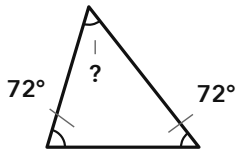
ANSWER _____

5 Find the angle marked ?.



ANSWER _____

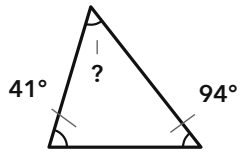
6 Find the angle marked ?.



ANSWER _____

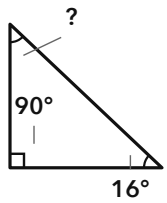
APPLY IT Show your work

1 A kite has a triangular panel with the angles shown. What is the angle at the corner marked ?



ANSWER _____

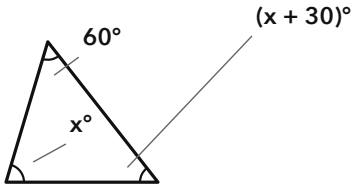
2 A skate ramp has a triangular side with the angles shown. What is the angle at the corner marked ?



ANSWER _____

CHALLENGE One step up

Find x and all three angle measures. Show how you know your answer is correct.



WORK SPACE AND ANSWER

ANSWER KEY

Triangle Angle Hunt

GRADE 6 · 6.GM.3.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the angle marked ?.	**70°**
2	Find the angle marked ?.	**62°**
3	Find the angle marked ?.	**47°**
4	Find the angle marked ?.	**55°**
5	Find the angle marked ?.	**34°**
6	Find the angle marked ?.	**36°**

PART 2 · APPLY IT

1. **45°** The known angles total 135°. Subtract 135° from 180° to get 45°.
2. **74°** The known angles total 106°. Subtract 106° from 180° to get 74°.

CHALLENGE

x = 45; the angles are 45°, 75°, and 60°. Since 45° + 75° + 60° = 180°, the angle measures are correct.

Accept angle answers with or without the degree symbol. For the challenge, accept any correct equation or explanation that uses the 180° triangle angle sum.