Name_____ Date_____ Period_____

LESSON 5-8 · SESSION 1 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Area of Triangles

Builds on Lesson 5-2 Session 1 · 6.G.A.1

TODAY'S LESSON	You will find one slanted face, like ½ × 12 × 9 for the trophy top.
YOU NEED TO	Find a triangle's area with A = ½ × b × h, like ½ × 14 × 9. **You will use it in Practice Form A, problems 1, 3, and 4.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Write** A = ½ × b × h with the numbers.
2. **Halve** the even number first.
3. **Multiply** what is left. Write square units.

WATCH ME

the steps in action

A face has a base of 14 cm and a height of 9 cm. Find its area.

Step 1 A = ½ × 14 × 9.

Step 2 Half of 14 is 7.

Step 3 7 × 9 = 63, so 63 cm².

Answer **63 cm²**

TRY IT WITH HELP

fill in each step

1. Base 10 in, height 17 in. Find the area.

Step 1 A = ½ × _____ × _____

Step 2 Half of 10 is _____

Step 3 5 × 17 = _____ in²

2. Base 6 m, height 11 m. Find the area.

Step 1 A = ½ × _____ × _____

Step 2 Half of 6 is _____

Step 3 3 × 11 = _____ m²

YOUR TURN

use the steps on your own

3. Find each area. Use A = ½ × b × h.

a. ½ × 18 × 11 = _____ **b.** ½ × 20 × 23 = _____ **c.** ½ × 26 × 15 = _____

d. ½ × 8 × 13 = _____ **e.** ½ × 28 × 17 = _____ **f.** ½ × 24 × 19 = _____

Tell Slant Height From Height

Builds on Lesson 5-6 Session 1 · 6.G.A.4

TODAY'S LESSON	You will find each face with its slant height, like the 26 ft label on the roof cap.
YOU NEED TO	Know which length is the slant height: it runs down the middle of a face. **You will use it in Practice Form A, problems 2 and 5.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Find** the base edge of the face.
2. **Pick** the slant height: it runs down the middle of a face.
3. **Use** ½ × base edge × slant height.

WATCH ME

the steps in action

A square pyramid has base edge 10 ft, height 12 ft, and slant height 13 ft. Find one face.

Step 1 Base edge: 10 ft.

Step 2 Slant height: 13 ft. Skip the 12 ft height.

Step 3 ½ × 10 × 13 = 65.

Answer **65 ft²**

TRY IT WITH HELP

fill in each step

4. Base edge 16 cm, height 15 cm, slant height 17 cm. Find one face.

Step 1 Base edge: _____ cm

Step 2 Slant height: _____ cm

Step 3 ½ × 16 × 17 = _____ cm²

5. Base edge 12 in, height 8 in, slant height 10 in. Find one face.

Step 1 Base edge: _____ in

Step 2 Slant height: _____ in

Step 3 ½ × 12 × 10 = _____ in²

YOUR TURN

use the steps on your own

6. Find one face. Each lists base edge, height, slant height.

a. 6, 4, 5 _____

b. 24, 5, 13 _____

c. 18, 12, 15 _____

d. 14, 24, 25 _____

READY CHECK

a problem like the one in today's lesson

7. Base edge 8 m, height 3 m, slant height 5 m. What is the area of one face?

A 12 m² **B** 20 m² **C** 24 m² **D** 40 m²

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____