Name_____ Date_____ Period_____

LESSON 7-7 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Use Equivalent Ratios for Scale

Builds on Lesson 3-3 · 6.RP.A.3a

TODAY'S LESSON	On a plan, 1 unit = 6 ft. So 4 units is 4 × 6 = 24 ft.
YOU NEED TO	Change grid units to feet with a scale, like 1 unit = 25 ft. **You will use it in Practice Form A, problems 1 and 4.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Read** the scale: 1 unit = how many feet.
2. Units to feet: **multiply**. Feet to units: divide.
3. **Label** the answer with feet or units.

WATCH ME

the steps in action

Scale: 1 unit = 25 ft. A side is 6 units long. How long is it in feet?

Step 1 1 unit = 25 ft.

Step 2 Units to feet: 6 × 25 = 150.

Step 3 The side is 150 ft.

Answer **150 ft**

TRY IT WITH HELP

fill in each step

1. Scale: 1 unit = 10 ft. A side is 7 units. How many feet?

Step 1 1 unit = _____ ft.

Step 2 Units to feet: 7 × 10 = _____.

Step 3 The side is _____ ft.

2. Scale: 1 unit = 5 ft. A wall is 40 ft. How many units?

Step 1 1 unit = _____ ft.

Step 2 Feet to units: 40 ÷ 5 = _____.

Step 3 The wall is _____ units.

YOUR TURN

use the steps on your own

3. Change each measure. Write ft or units.

a. 1 unit = 3 ft; 12 units _____

b. 1 unit = 4 ft; 9 units _____

c. 1 unit = 15 ft; 8 units _____

d. 1 unit = 10 ft; 80 ft _____

e. 1 unit = 25 ft; 175 ft _____

f. 1 unit = 6 ft; 42 ft _____

Perimeter and Area on Grids

Builds on Lesson 7-7 Session 1 · 6.G.A.3

TODAY'S LESSON	The parking pad side from (−7, 5) to (5, 5) is 12 units long.
YOU NEED TO	Find a grid rectangle's length, width, perimeter and area in units. **You will use it in Practice Form A, problems 2, 3 and 6.**

STEPS TO FOLLOW

use these same steps on every problem

1. Find the **length**: the distance across the top side.
2. Find the **width**: the distance down the right side.
3. Find **perimeter** (add four sides) and area (length × width).

WATCH ME

the steps in action

A rectangle has vertices (−3, 4), (5, 4), (5, −2) and (−3, −2). Find its perimeter and area.

Step 1 Length: (−3, 4) to (5, 4) is 3 + 5 = 8 units.

Step 2 Width: (5, 4) to (5, −2) is 4 + 2 = 6 units.

Step 3 P = 8 + 6 + 8 + 6 = 28 units. A = 8 × 6 = 48 square units.

Answer **P = 28 units, A = 48 square units**

TRY IT WITH HELP

fill in each step

4. Vertices: (−2, 3), (4, 3), (4, −1) and (−2, −1).

Step 1 Length: 2 + 4 = _____ units.

Step 2 Width: 3 + 1 = _____ units.

Step 3 P = _____ units. A = _____ square units.

5. Vertices: (−4, 5), (3, 5), (3, −3) and (−4, −3).

Step 1 Length: 4 + 3 = _____ units.

Step 2 Width: _____ + 3 = 8 units.

Step 3 P = _____ units. A = _____ square units.

YOUR TURN

use the steps on your own

6. A rectangle has vertices (−6, 4), (4, 4), (4, −2) and (−6, −2).

a. length _____ **b.** width _____ **c.** perimeter _____ **d.** area _____

READY CHECK

a problem like the one in today's lesson

7. Corners: (−5, 3), (7, 3), (7, −2) and (−5, −2). What is the area?

A 17 square units **B** 34 square units **C** 60 square units **D** 10 square units

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