Name_____ Date_____ Period_____

LESSON 5-4 · SESSION 2 · PRACTICE · FORM B

Composite Figures

Learning target – I can find the area of a composite figure by adding or subtracting the areas of simpler shapes. · 6.G.A.1

REMEMBER

- A **composite figure** is made of simpler shapes: rectangles, triangles, squares.
- **Add** the areas of pieces that are joined. **Subtract** the area of a piece that is cut out.
- Use each piece's own formula: rectangle l × w, triangle ½ × b × h.

WORKED EXAMPLE

A 14 cm by 9 cm rectangle has a triangle (base 6 cm, height 4 cm) cut out.

Step 1 Whole rectangle: 14 × 9 = 126 cm².

Step 2 Cut-out triangle: ½ × 6 × 4 = 12 cm².

Step 3 Removed, so subtract: 126 − 12.

Answer **114 cm² left**

WORDS **composite figure** *(figura compuesta)* · **add** *(sumar)* · **subtract** *(restar)*

PRACTICE

show your work · label units

1. Decide whether to add or subtract. Then find each area.

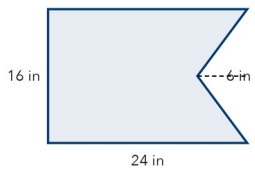
a. 36 cm² rectangle + 10 cm² triangle ___ cm²

b. 81 in² square, 25 in² cut out ___ in²

c. 8 ft square, 2 ft square cut out ___ ft²

d. 12 m × 5 m, 3 m square cut out ___ m²

2. **Swallowtail Flag.** A flag starts as a rectangle 24 in by 16 in. A triangle notch 6 in deep is cut out of the right edge.

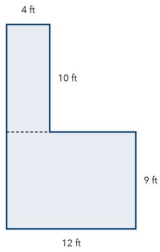


a. Area of the whole rectangle _____ in²

b. Area of the notch _____ in²

c. Area of the flag _____ in²

3. **L-Shaped Room.** An L-shaped floor splits into a 12 ft by 9 ft rectangle and a 4 ft by 10 ft rectangle. Find the floor area.



Show your work.

Answer_____ ft²

4. Wall and Window. A wall is 18 ft long and 9 ft tall. A square window 4 ft on each side is not painted. Find the painted area.

Hint *The window is taken away.*

Show your work.

Answer_____ ft²

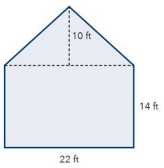
5. Plywood Sheet. A plywood sheet is 20 ft by 8 ft. A 5 ft by 3 ft opening is cut out. How much plywood is left?

Show your work.

Answer_____ ft²

6. House Front. A house front is a rectangle with a triangle roof. Find the total area.

Hint *Use each shape's own formula, then add.*



Show your work.

Answer_____ ft²

7. Nico's Poster. A poster is 30 in by 24 in. An 8 in square is cut from one corner. Nico says 720 in² is left. Is Nico right?

Hint *Did the corner square get taken away?*

Show your work.

Area left_____

8. Playground Plan. A playground is 28 m by 18 m. Rubber covers all of it except a triangle sandbox (base 10 m, height 8 m). Rubber costs $12 per m².

a. Area of the whole rectangle _____ m²

b. Area covered with rubber _____ m²

c. Cost of the rubber _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. Lila's Work. A wall is 17 ft by 10 ft with a 4 ft by 4 ft vent that is not painted. Lila wrote: "Painted area = 170 + 16 = 186 ft²." Explain the mistake and fix it.

TEST PRACTICE

choose the best answer

10. A 64 in² square with a 9 in² square cut out has an area of –

A 55 in² **B** 73 in² **C** 61 in² **D** 576 in²

11. A 50 cm² rectangle joined to a 15 cm² triangle has a total area of –

A 35 cm² **B** 50 cm² **C** 65 cm² **D** 750 cm²

SELF-CHECK CODE

find your answer · copy its letter into that problem's box · spell a math word

656	432	146	784	5,568	464	336	418	148	145
N	Q	M	Z	D	E	C	I	O	B

#2c	#3	#4	#5	#6	#7	#8b	#8c

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