Name_____ Date_____ Period_____

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

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.

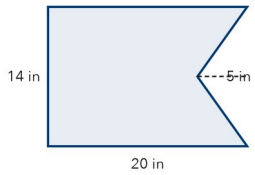
a. 40 cm² rectangle + 12 cm² triangle ___ cm²

b. 100 in² square, 16 in² cut out ___ in²

c. 9 ft square, 3 ft square cut out ___ ft²

d. 10 m × 4 m, 2 m square cut out ___ m²

2. **Swallowtail Flag.** A flag starts as a rectangle 20 in by 14 in. A triangle notch 5 in deep is cut out of the right edge.

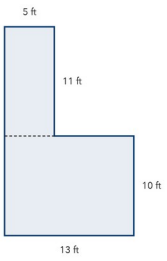


a. Area of the whole rectangle _____ in²

b. Area of the notch _____ in²

c. Area of the flag _____ in²

3. **L-Shaped Room.** An L-shaped floor splits into a 13 ft by 10 ft rectangle and a 5 ft by 11 ft rectangle. Find the floor area.



Show your work.

Answer_____ ft²

4. Wall and Window. A wall is 22 ft long and 10 ft tall. A square window 5 ft on each side is not painted. Find the painted area.

Hint *The window is taken away.*

Show your work.

Answer_____ ft²

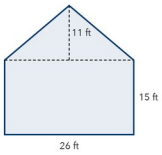
5. Plywood Sheet. A plywood sheet is 24 ft by 9 ft. A 6 ft by 3 ft opening is cut out. How much plywood is left?

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. Deja's Poster. A poster is 32 in by 25 in. A 10 in square is cut from one corner. Deja says 800 in² is left. Is Deja right?

Hint *Did the corner square get taken away?*

Show your work.

Area left_____

8. Playground Plan. A playground is 30 m by 20 m. Rubber covers all of it except a triangle sandbox (base 12 m, height 10 m). Rubber costs $14 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. Omar's Work. A wall is 19 ft by 11 ft with a 5 ft by 5 ft vent that is not painted. Omar wrote: "Painted area = 209 + 25 = 234 ft²." Explain the mistake and fix it.

TEST PRACTICE

choose the best answer

10. When a piece is cut out of a figure, you –

A add its area
B subtract its area
C multiply by its area
D ignore it

11. A composite figure is made of –

A only triangles
B one rectangle
C two or more simpler shapes
D curved lines only

SELF-CHECK CODE *find your answer · copy its letter into that problem's box · spell a math word*

700 A	7,560 T	540 C	315 Q	185 U	198 T	245 S	900 Z	533 R	195 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 #___