



Area of composite figures

GRADE 7 MATH

Name _____

Date _____

Do this on your own — the worked example shows what to do. List the pieces before totalling. Leave π in your answers. One skill: **composite area**.

WORKED EXAMPLE

Decompose and add, or compose and subtract. Before using a length, ask which piece it belongs to. A length spanning a semicircle is its **DIAMETER**, so halve it for the radius.

1. Find the area of a rectangle 14 cm by 5 cm.

FLUENCY

Show your thinking

Answer

2. Find the area of a triangle with base 14 cm and height 4 cm.

FLUENCY

Show your thinking

Answer

3. A shape is that rectangle with that triangle on top. Find the total area.

APPLICATION

Show your thinking

Answer

4. An L-shape is a 15 cm by 10 cm rectangle with a 6 cm by 4 cm rectangle removed. Find its area.

APPLICATION

Show your thinking

Answer

5. A semicircle is attached to the 10 cm end of a rectangle. Find the semicircle's area, stating the radius first.

REASONING

Show your thinking

Answer

6. If a student had used 10 cm as the radius in question 5, what area would they get?

APPLICATION

Show your thinking

Answer

7. By what factor would they be wrong? Explain where that factor comes from.

REASONING

Show your thinking

Answer

8. Find the area of a quarter circle with radius 6 cm, and explain how you adapted the circle formula.

REASONING

Show your thinking

Answer