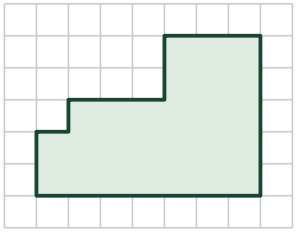
Finding Area by Decomposing

ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 1, Lesson 2

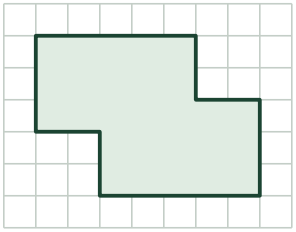
1. Determine the total area of each shaded region. Each square on the grid has an area of 1 square unit.

a



Area: **26 sq. units**

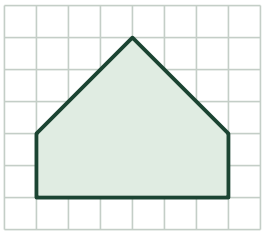
b



Area: **27 sq. units**

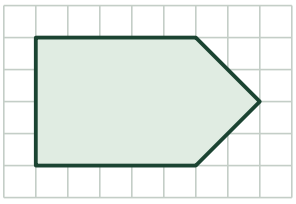
2. Determine the total area of each shaded region. Each square on the grid has an area of 1 square unit.

a



Area: **21 sq. units**

b

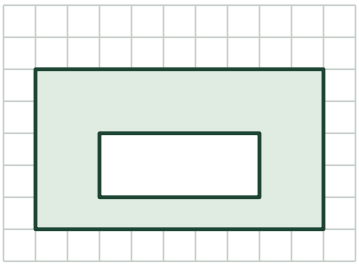


Area: **24 sq. units**

2a: rectangle 6 × 2 = 12 plus triangle (half of 6 × 3) = 9. 2b: rectangle 5 × 4 = 20 plus triangle (half of 4 × 2) = 4.

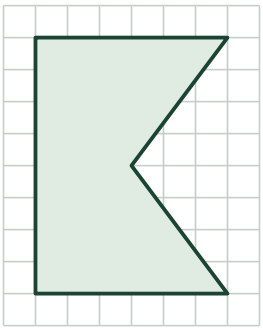
Finding Area by Decomposing

3. Determine the total area of the shaded region. Each side of a grid square is 1 meter.



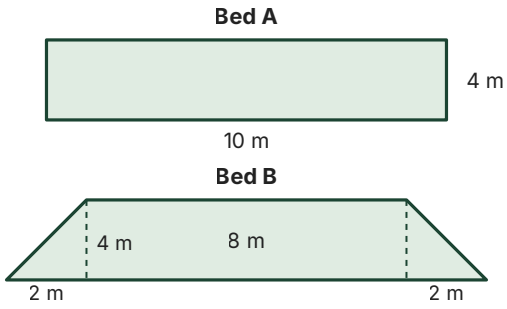
9 × 5 = 45 and 5 × 2 = 10. 45 – 10 = 35 square meters

4. Determine the area of the shape. Each square on the grid has an area of 1 square unit.



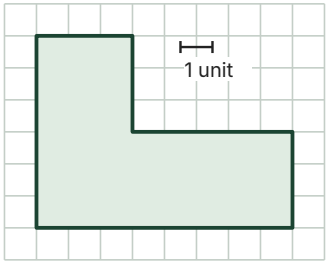
Rectangle 6 × 8 = 48 minus the triangle cut out (half of 8 × 3 = 12). 48 – 12 = 36 square units

5. Two flower beds have very different shapes. Lily says both flower beds have the same area. Is Lily correct? Explain your thinking.



Yes. Bed B is an 8 m × 4 m rectangle (32 m²) with two triangles. The triangles fit together to make a 2 m × 4 m rectangle (8 m²). 32 + 8 = 40 m², the same as Bed A (10 × 4 = 40 m²).

6. Marco calculated the area of this figure. His work is shown. Is Marco correct? Explain your thinking.



Marco's work

(8 × 6) – (5 × 2)
= 48 – 10
= 38 square units

No. The missing corner is 5 units wide and 3 units tall, so Marco should subtract 5 × 3 = 15. The area is 48 – 15 = 33 square units.