

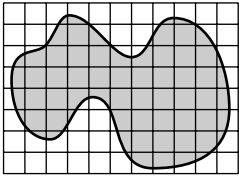
Area of Irregular Figures (pages 423–426)

An **irregular figure** does not necessarily have straight sides and square corners. You can estimate the area of an irregular figure with grid paper.

Method 1	<ul style="list-style-type: none"> • First, trace an outline of the figure onto grid paper. Find the number of whole squares that are <i>completely</i> within the outline. This number is the inner measure. • Find the number of whole squares that contain <i>part</i> of the figure and add this number to the inner measure to get the outer measure. • The mean (average) of the inner measure and outer measure is the estimated area of the irregular figure.
Method 2	You may be able to divide some irregular figures into shapes that look like squares and rectangles. You can then add the areas of those figures to estimate the area of the irregular figure.

EXAMPLE

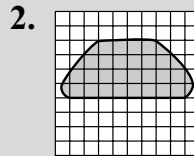
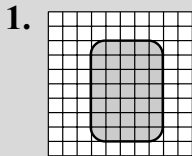
Estimate the area of the figure.



inner measure = 30 There are 30 whole squares within the outline.
 outer measure = 66 There are 36 whole squares that contain part of the figure.
 Add 36 to the inner measure to get the outer measure.
 mean: $\frac{30 + 66}{2} = 48$
 An estimate of the area of this irregular figure is 48 square units.

Try These Together

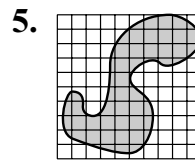
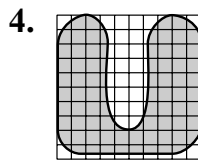
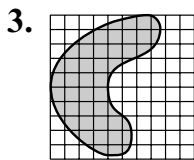
Estimate the area of each figure.



HINT: Take your time and count the number of squares carefully.

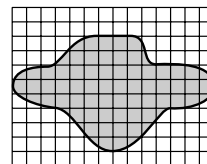
PRACTICE

Estimate the area of each figure.



6. **Standardized Test Practice** What is the best estimate of the area of the figure?

- A** 13.5 units² **B** 24.5 units²
C 39.5 units² **D** 59.5 units²



Answers: 1. about 33 units² 2. about 30 units² 3. about 40 units² 4. about 67.5 units² 5. about 40.5 units² 6. D