

TABE Math-E

PAXEN

Unit-6 Geometry Lesson 45 Area and Sq Units

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Some graphics may not have copied well during the scan process.

Math-E - Lesson 45 – Area and Sq. Units

Lesson 45 Measure Area in Square Units

3.MD.5.b - Low

The **area** of a 2-D shape is the space it occupies. To find the area, count the number of unit squares that cover the shape. A **unit square** has a side length of 1. Its area is 1 square unit.

Example How many unit squares cover this rectangle?

1) Cover the rectangle with unit squares, with no gaps or overlapping squares.

2) Count the number of unit squares covering the rectangle. Twelve unit squares cover the rectangle.

The area of the rectangle is 12 square units.

Example What is the area of this shape?

1) Cover the shape with unit squares, with no gaps or overlapping squares.

2) Count the number of unit squares covering the shape. Twelve unit squares cover the shape.

The area of the shape is 12 square units.

Test Example

- 1. What is the area of this rectangle?
 - A. 3 units
 - **B**. 5 square units
 - C. 15 units
 - D. 15 square units
- **1. D** 3 units by 5 units equals 15 square units.

Hint

square units.

Remember that area is always given in

Math-E - Lesson 45 – Area and Sq. Units

Practice

Read each question. Select the correct answer.

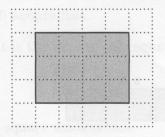
1

What is the area of the shaded rectangle?



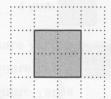
- A. 2 square units
- **B**. 3 square units
- C. 6 square units
- D. 10 square units

What is the area of the shaded rectangle?

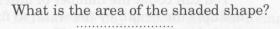


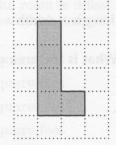
- A. 4 square units
- **B**. 12 square units
- C. 18 square units
- D. 30 square units

What is the area of the shaded square?



- A. 4 square units
- B. 8 square units
- C. 12 square units
- D. 16 square units





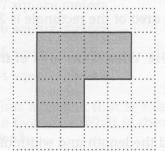
- A. 1 square unit
- B. 4 square units
- C. 5 square units
- D. 6 square units

5

6

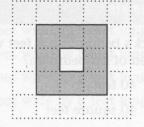
4

What is the area of the shaded shape?



- A. 6 square units
- **B**. 9 square units
 - C. 10 square units
 - D. 12 square units

What is the area of the shaded shape?



- A. 1 square unit
- B. 3 square units
- C. 8 square units
- D. 9 square units

Math-E - Lesson 45 – Area and Sq. Units

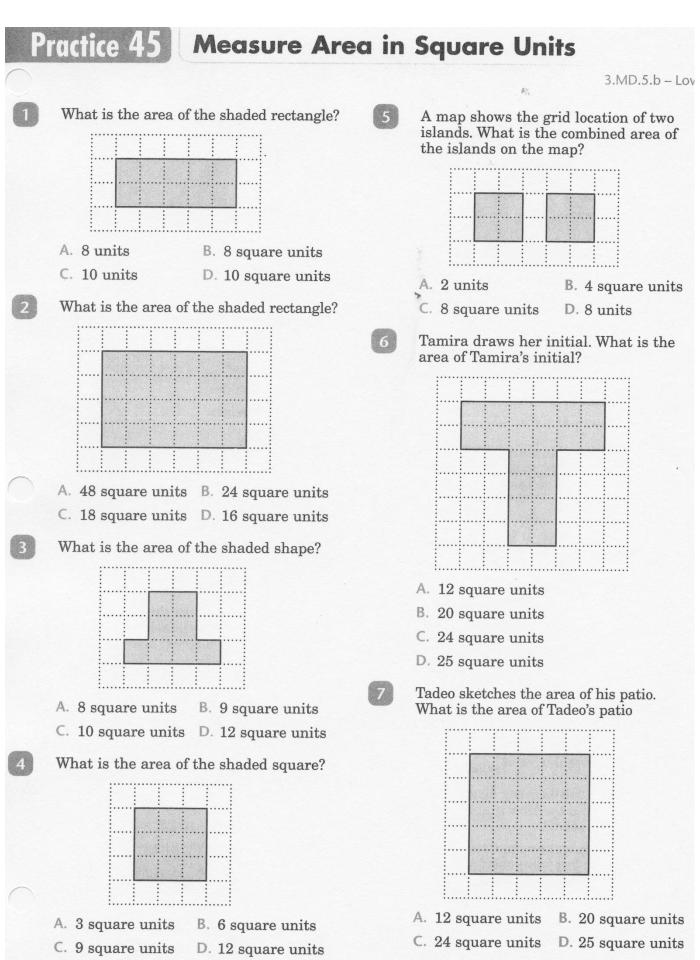
Lesson 45

Measure Area in Square Units

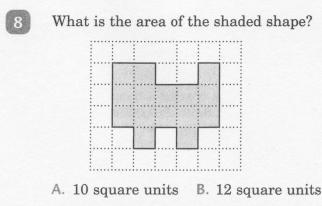
(3.MD.5.b)

- 1. C. 6 square units cover the rectangle.
- 2. B. 12 square units cover the rectangle.
 - 3. A. 4 square units cover the square.
 - 4. C. 5 square units cover the shape.
 - 5. D. 12 square units cover the shape.
 - 6. C. 8 square units cover the shape.

Math-E - Practice 45 – Area and Sq. Units

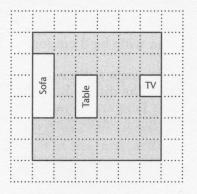


Math-E - Practice 45 – Area and Sq. Units



C. 15 square units D. 21 square units

Use the diagram to answer question 9.



Part A

Tabansi draws a furniture arrangement on grid paper. What is the area of the furniture on the grid paper?

A. 6 square units B. 7 square units

C. 8 square units D. 9 square units

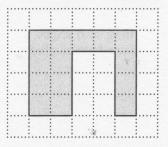
Part B

What is the area of the available floor space on the grid paper?

- A. 42 square units B. 30 square units
- C. 28 square units D. 27 square units

10

What is the area of the shaded shape?



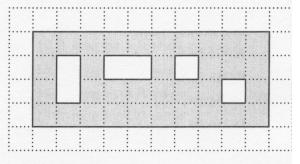
A. 10 square units B. 12 square units

C. 14 square units D. 16 square units



12

Kathryn manages an art gallery. She uses graph paper to plan the artwork arrangement for an upcoming exhibit. What is the area of the shaded wall space on Kathryn's graph paper?



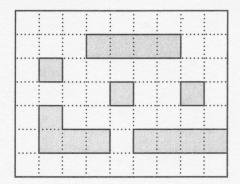
A. 34 square units

B. 36 square units

C. 40 square units

D. 46 square units

A building inspector drafts an outline of the exterior wall in his notebook. The shaded areas need repairs. Which two statements are true?



- A. The combined area of the shaded space is 13 square units.
- **B.** The combined area of the shaded space is 15 square units.
- C. The combined area of the shaded space is 16 square units.
- D. The area of the unshaded space is 48 square units.
- E. The area of the unshaded space is 50 square units.
- F. The area of the unshaded space is 63 square units.

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Practice 45

Measure Area In Square Units

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(3.MD.5.b)

- 1. D. The rectangle is 10 square units.
- 2. B. The rectangle is 24 square units.
- 3. A. The shape is 8 square units.
- 4. C. The square is 9 square units.
- 5. C. Each island is 4 square units, so the combined area of the islands is 4 + 4 = 8 square units.
- 6. B. The area of Tamira's initial is 20 square units.
- 7. D. The area of Tadeo's patio is 25 square units.
- 8. C. The shape is 15 square units.
- **9.** Part A: A. The sofa is 3 square units, the table is 2 square units, and the TV is 1 square unit. The combined area of the furniture is 3 + 2 + 1 = 6 square units.
 - **Part B:** B. The room is 36 square units. Subtract the area of the furniture, 6 square units, from the area of the room, 36 square units: 36 6 = 30. The available floor space is 30 square units.
- **10.** C. The shape is 14 square units.
- 11. A. The total wall space is 40 square units. The artwork takes ups 2 + 2 + 1 + 1 = 6 square units. Subtract the area of the artwork from the area of the wall: 40 6 = 34 square units. The area of the available wall space is 34 square units.
- 12. B, D. The shaded spaces take up 1 + 1 + 1 + 4 + 4 + 4 = 15 square units. The entire space is 63 square units. Subtract the area of the shaded spaces from the area of the space: 63 15 = 48. The area of the unshaded space is 48 square units.