# CRAVEN 

COMMUNITY COLLEGE

## TABE Math-E

## PAXEN

## Unit-6 Geometry <br> 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
2. D 3 units by 5 units equals 15 square units.

## Hint

Remember that area is always given in square units.

## 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

2 What is the area of the shaded rectangle?

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

3 What is the area of the shaded square?

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

4 What is the area of the shaded shape?

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

5 What is the area of the shaded shape?

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

6 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

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

## Practice 45 Measure Area in Square Units

1 What is the area of the shaded rectangle?

A. 8 units
B. 8 square units
C. 10 units
D. 10 square units

2 What is the area of the shaded rectangle?

A. 48 square units
B. 24 square units
C. 18 square units
D. 16 square units

3 What is the area of the shaded shape?

A. 8 square units
B. 9 square units
C. 10 square units
D. 12 square units

4 What is the area of the shaded square?

A. 3 square units
B. 6 square units
C. 9 square units
D. 12 square units

5 A map shows the grid location of two islands. What is the combined area of the islands on the map?

A. 2 units
B. 4 square units
C. 8 square units
D. 8 units

6 Tamira draws her initial. What is the area of Tamira's initial?

A. 12 square units
B. 20 square units
C. 24 square units
D. 25 square units

7 Tadeo sketches the area of his patio. What is the area of Tadeo's patio

A. 12 square units
B. 20 square units
C. 24 square units
D. 25 square units

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

8 What is the area of the shaded shape?

A. 10 square units
B. 12 square units
C. 15 square units
D. 21 square units

## Use the diagram to answer question 9.



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

11 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

12 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.

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

## Practice 45 Measure Area In Square Units

 pp. 32-33(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.
