3.6.C - 3.6.D - Area of rectangles Problem Set: 1

| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|-----|-----|-----|-----|-----|-----|-----|
| А | D | В | С | D | С | А |
| | | | | | | |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| 42 | D | 28 | С | А | С | С |
| | | | | | | |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| В | С | А | D | С | А | В |
| | | | | | | |
| 22. | 23. | 24. | 25. | 26. | 27. | 28. |
| 57 | С | С | D | В | А | С |
| | | | | | | |
| 29. | 30 | 31. | 32. | 33. | 34. | 35. |
| 50 | С | В | А | А | В | С |
| | | | | | | |

1. Denise planted a flower garden with a rectangular section and a square section as shown.

What is the total area of the garden in square feet?

A. 56 square feet

B. 112 square feet

C. 80 square feet

D. Not here





2. The shaded Figure on the grid represents Erin's rectangular lawn. What is the area in square meters of Erin's lawn?

- A. 18 square meters
- B. 36 square meters
- C. 62 square meters
- D. 72 square meters



= 1 square meter

3. A model of a rectangular bulletin board is shown. The top row has been divided into squares of equal size. The rest of the model will also be divided into squares of the same size. What is the area in square units represented by this model?

- A. 8 square units
- B. 15 square units
- C. 12 square units
- D. 16 square units



4. Maria put cloth squares together to make a blanket. The blanket is modeled by this rectangle. What is the area of the blanket?

A. 17 square feet

B. 34 square feet

C. 72 square feet

D. 63 square feet



1

5. Each rectangle shown will be covered with equal-size squares. Some of the squares have been placed as shown Which of these rectangles have an area of 36 square centimeters?

A. Rectangles V, W, X, Y, and Z

- B. Rectangles X and y only
- C. Rectangles W and Z only
- D. Rectangles V, X, and Y only





Rectangle W



Rectangle X







6. Alexis cut out a rectangle from a piece of graph paper. The squares on the graph paper are 1 centimeter square. The rectangle Alexis cut out is 8 squares across the top and 7 squares down the side.

What is the area of the rectangle in square centimeters?

- A. 15 square centimeters
- B. 64 square centimeters
- C. 56 square centimeters
- D. 560 square centimeters

7. Joseph counted the square tiles on the ceiling of his rectangular closet. The area of each tile is 1 square foot. The ceiling has 5 rows of tiles with 4 tiles in each row.

What is the area of the ceiling of Joseph's closet in square feet?

- A. 20 square feet
- B. 10 square feet
- C. 18 square feet
- D. 9 square feet

3.6.C - 3.6.D - Area of rectangles Problem Set: 2

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----|-----|-----|-----|-----|-----|
| | £. | 0. | | 0. | 0. | |
| А | D | В | С | D | С | А |
| | | | | | | |
| | | | | | | |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| | | | | | | |
| 42 | D | 28 | С | A | С | С |
| | | | | | | |
| | | | | | | |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| Р | 0 | ٨ | D | 0 | ٨ | D |
| В | C | A | D | C | A | В |
| | | | | | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 20. | | 20. | 201 | 27. | 20. |
| 57 | С | С | D | В | А | С |
| | | | | | | |
| | | | | | | |
| 29. | 30 | 31. | 32. | 33. | 34. | 35. |
| | | | - | | | |
| 50 | C | В | A | A | В | C |
| | | | | | | |
| | | | | | | |

8. The diagram represents the floor of a storage building. The floor is composed of two rectangles.

What is the area of the floor in square yards?





= 1 square yard

9. Heidi is making a rectangular card. The shaded rectangle on the grid represents the card.

What is the area of the card in square centimeters?

- A. 18 square centimeters
- B. 36 square centimeters
- C. 90 square centimeters
- D. 81 square centimeters



10. Felicia started placing square tiles inside a rectangle, as shown in the diagram. Each square tile has a side length of 1 cm She continued placing square tiles without any overlaps to cover the rectangle. What is the area of the rectangle in square centimeters.



11. Martha bought a new blanket. It is made up of squares sewn together into a rectangle. What is the area of the blanket?

1

- A. 42 square feet
- B. 48 square feet
- C. 54 square feet
- D. 15 square feet



12. Each rectangle shown will be covered with equal-size squares. Some of the squares have been placed as shown. Which of these rectangles have an area of 18 square centimeters?

- A. Rectangle T and Z only
- B. Rectangle Y and W only
- C. Rectangles V and X only
- D. Rectangles V and T only





Rectangle W









13. Donte counted the square tiles on a rectangular floor at his school. Each tile had an area of 1 square foot. On the floor there were 9 rows of tiles and 36 tiles in each row.

What is the area of the floor in square feet?

- A. 360 square feet
- B. 45 square feet
- C. 324 square feet
- D. 90 square feet

14. Deion is painting a mural on the side of a building. He marked the wall for the mural in 1-foot squares. The mural will be a rectangle 8 squares across and 6 squares high.

What will be the area of the mural in square feet?

- A. 60 square feet
- B. 54 square feet
- C. 48 square feet
- D. 16 square feet

3.6.C - 3.6.D - Area of rectangles Problem Set: 3

| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|-----|-----|-----|-----|-----|-----|-----|
| А | D | В | С | D | С | А |
| | | | | | | |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| 42 | D | 28 | С | А | С | С |
| | | | | | | |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| В | С | А | D | С | А | В |
| | | | | | | |
| 22. | 23. | 24. | 25. | 26. | 27. | 28. |
| 57 | С | С | D | В | A | С |
| | | | | | | |
| 29. | 30 | 31. | 32. | 33. | 34. | 35. |
| 50 | С | В | А | А | В | С |
| | | | | | | |

15. Isaac is replacing some grass in the corner of his yard. The model below shows the shape of the part of the yard where Isaac is replacing the grass.

What is the total area of part of the yard where Isaac is replacing the grass?

A. 40 Square feet

B. 60 Square feet

C. 100 Square feet

D. 460 Square feet



= 1 square foot

16. Brooklyn is cutting a tabletop out of a piece of plywood. The shaded rectangle on the grid represents the tabletop.

What is the area of the tabletop in square inches?

- A. 10 square inches
- B. 20 square inches
- C. 100 square inches
- D. 110 square inches



17. Workers at a school are covering a rectangular patio with square tiles. Each square tile has an area of 1 square yard. The figure shows the part of the patio that has already been covered with square tiles.





What is the area of the entire patio in square yards?

A. 105 Square yards

B. 90 Square yards

C. 98 Square yards

D. 84 Square yards

3.6.C - 3.6.D - Area of rectangles - PS

18. Alice sewed a quilt for her new nephew. It was made of cloth squares sewn into a rectangle. The blanket is modeled by this rectangle. What is the area of the blanket?

A. 14 square feet

B. 36 square feet

C. 42 square feet

D. 48 square feet



19. Each rectangle shown will be covered with equal-size squares. Some of the squares have been placed as shown. Which of these rectangles have an area of 24 square centimeters?

- A. Rectangle T and Z only
- B. Rectangle Y and W only
- C. Rectangles V only
- D. Rectangles V and T only





Rectangle W





Rectangle T

Rectangle Y





Rectangle Z

20. Martina is covering the tops of some jewelry boxes with ceramic tiles that are 1-inch squares. Each box top takes 6 tiles across the top and 5 squares along the side.

What is the area of the top of each jewelry box in square inches?

- A. 30 square inches
- B. 65 square inches
- C. 11 square inches
- D. 350 square inches

21. Anthony is re-tiling the hall in his house. The old tiles he is replacing are 1-foot squares. He is replacing them with tiles of the same size. The Hall has 3 rows of tiles with 8 tiles in each row.

What is the area of the hall that Anthony is re-tiling?

- A. 14 square feet
- B. 24 square feet
- C. 36 square feet
- D. 48 square feet

3.6.C - 3.6.D - Area of rectangles Problem Set: 4

| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|-----|-----|-----|-----|-----|-----|-----|
| А | D | В | С | D | С | A |
| | | | | | | |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| 42 | D | 28 | С | А | С | С |
| | | | | | | |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| В | С | А | D | С | А | В |
| | | | | | | |
| 22. | 23. | 24. | 25. | 26. | 27. | 28. |
| 57 | С | С | D | В | А | С |
| | | | | | | |
| 29. | 30 | 31. | 32. | 33. | 34. | 35. |
| 50 | С | В | А | А | В | С |
| | | | | | | |

22. The diagram represents the floor of a bedroom and a closet. The floor is composed of a rectangle and a square. What is the area of the floor in square feet?





3.6.C - 3.6.D - Area of rectangles - PS

23. Aniyah is planning her garden for next year. The shaded area represents the part of the garden she plans to use for onions.

What is the area in square feet that Aniyah plans for her onion patch?

A. 9 square feet

B. 12 square feet

C. 27 square feet

D. 93 square feet



24. Carlos is building a storage shed in his back yard. He is covering the floor with square tiles that are 1-foot square. The model shows the tile he has already installed. What is the area of the floor of the storage shed in square feet?

A. 105 Square feet

B. 90 Square feet

C. 98 Square feet

D. 84 Square feet



= 1 square centimeter

25. Phillip bought a rug for his hall. The rug is modeled by this rectangle. What is the area of the rug?

A. 13 square feet

B. 18 square feet

C. 27 square feet

D. 36 square feet



26. Each rectangle shown will be covered with equal-size squares. Some of the squares have been placed as shown. Which of these rectangles have an area of 16 square centimeters?

- A. Rectangle T and Z only
- B. Rectangle Y only
- C. Rectangles Y and X only
- D. Rectangles V and T only







27. Travis counted the square tiles on a rectangular floor in his school library. Each tile had an area of 1 square foot. On the floor there were 10 rows of tiles and 9 tiles in each row.

What is the area of the floor in square feet?

- A. 90 square feet
- B. 900 square feet
- C. 19 square feet
- D. 109 square feet

28. Noah is making a mosaic out of 1-inch square tiles. The mosaic will be 7 tiles wide by 7 tiles long.

What will be the area of the mosaic in square inches?

- A. 7 square inches
- B. 14 square inches
- C. 49 square inches
- D. 70 square inches

3.6.C - 3.6.D - Area of rectangles Problem Set: 5

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----|-----|-----|-----|-----|-----|
| | £. | 0. | | 0. | 0. | |
| А | D | В | С | D | С | А |
| | | | | | | |
| | | | | | | |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| | | | | | | |
| 42 | D | 28 | С | A | С | С |
| | | | | | | |
| | | | | | | |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| Р | 0 | ٨ | D | 0 | ٨ | D |
| В | C | A | D | C | A | В |
| | | | | | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 20. | | 20. | 201 | 27. | 201 |
| 57 | С | С | D | В | А | С |
| | | | | | | |
| | | | | | | |
| 29. | 30 | 31. | 32. | 33. | 34. | 35. |
| | | | - | | | |
| 50 | C | В | A | A | В | С |
| | | | | | | |
| | | | | | | |

29. Belinda is planting a U-shaped garden around a tree in her front yard. The garden will be composed of 3 rectangles. The diagram represents the shape of the garden.

What is the area of the garden in square feet?





= 1 square feet

30. Mia is cutting out a piece of cloth that she plans to use in a tapestry she is making.

The shaded area represents the size of the piece of cloth Mia plans to cut out.

What is the size of the piece of cloth in square centimeters?

- A. 8 square centimeters
- B. 15 square centimeters
- C. 56 square centimeters
- D. 78 square centimeters

31. Elijah is making a mosaic with square tiles. Each square tile has an area of 1 centimeter. The figure shows the part of the mosaic that has already been covered with square tiles.

= 1 square centimeter

What is the area of the entire mosaic in square centimeters?

- A. 105 Square centimeters
- B. 90 Square centimeters
- C. 98 Square centimeters
- D. 84 Square centimeters

32. Kris bought a blanket to take to the beach. The blanket is modeled by this rectangle. What is the area of the blanket?

A. 81 square feet

- B. 36 square feet
- C. 27 square feet
- D. 18 square feet



1 Foot 33. Each rectangle shown will be covered with equal-size squares. Some of the squares have been placed as shown. Which of these rectangles have an area of 15 square centimeters?

- A. Rectangle T and Z only
- B. Rectangle Y and W only
- C. Rectangles V and X only
- D. Rectangles V and T only

Rectangle W Rectangle X **Rectangle V Rectangle Z** = 1 square centimeter









34. Isabella is trying to figure out the size of her bed. She has tiles on the floor of her bedroom that are exactly 1-foot square. The bed covers up exactly 5 tiles from side to side and 7 tiles from head to foot.

What is the area of Isabella's bed in square feet?

- A. 350 square feet
- B. 35 square feet
- C. 12 square feet
- D. 75 square feet

35. Abigail is painting a giant checkerboard on the back patio of her school. Each square will be 1-foot square. There will be 8 rows and 8 columns. What will be the area of the checkerboard in square feet?

A. 8 square feet

B. 16 square feet

C. 64 square feet

D. 80 square feet