

1 Nicole works at a flower shop.

- She has 16 white tulips and 20 yellow tulips.
- She wants to put all of these tulips into vases, with no tulips left over.
- Each vase must have the same number of white tulips.
- Each vase must have the same number of yellow tulips.

What is the maximum number of vases that Nicole can create in this way?

- A 2
- B 4
- C 5
- D 8

2 Cindy has 32 apples and 24 bananas from which to make fruit baskets.

- Each basket must have both apples and bananas.
- Each basket must have an equal number of apples.
- Each basket must also have an equal number of bananas.
- She uses all her fruit.

What is the ***greatest*** number of baskets Cindy can make?

- A 4
- B 6
- C 8
- D 12

3 How many two-digit numbers are there that have 6 and 8 as factors?

A 2

B 4

C 6

D 8

4 Sarah made a special fruit drink for a party. She used:

- 2 pints of pineapple juice,
- 4 pints of orange juice, and
- 6 pints of club soda.

What ratio of pineapple juice to orange juice did Sarah use to make the fruit drink?

A 1 : 2

B 1 : 4

C 2 : 1

D 4 : 1

5 There are 3 cats for every 2 dogs at an animal shelter. Which choice could be the total number of cats and dogs at the shelter?

A 27

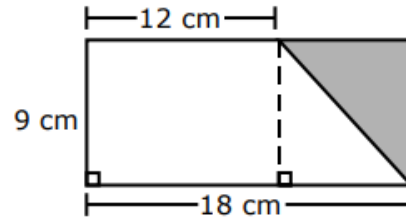
B 32

C 42

D 55

- 6 A farmer raises Hereford and Angus cows in a ratio of 9 Hereford cows for every 5 Angus cows. Which ratio could show the number of Hereford and Angus cows the farmer has?
- A 18 : 14
 - B 18 : 28
 - C 45 : 10
 - D 45 : 25

- 7 What is the area of the unshaded portion of this figure?



- A 126 cm²
- B 135 cm²
- C 145 cm²
- D 162 cm²

8 The width of a rectangular garden is $23\frac{1}{2}$ feet, and the perimeter of the garden is 134 feet. What is the area of the garden?

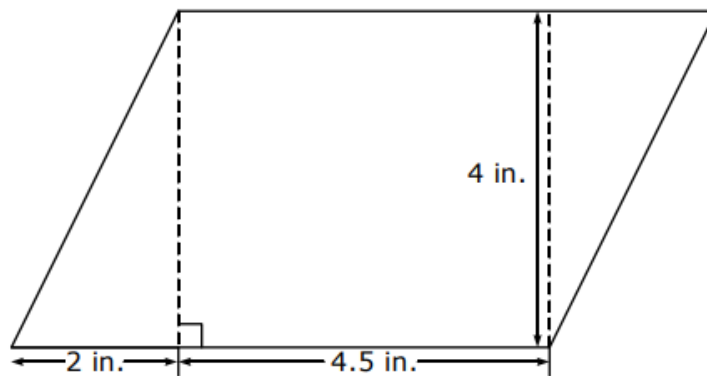
A $2,596\frac{1}{2}$ square feet

B $2,044\frac{1}{2}$ square feet

C $1,022\frac{1}{4}$ square feet

D $787\frac{1}{4}$ square feet

9 A section of a quilt is shaped like a parallelogram.



What is the minimum amount of fabric that is needed to cover this section completely?

A 13 square inches

B 17 square inches

C 21 square inches

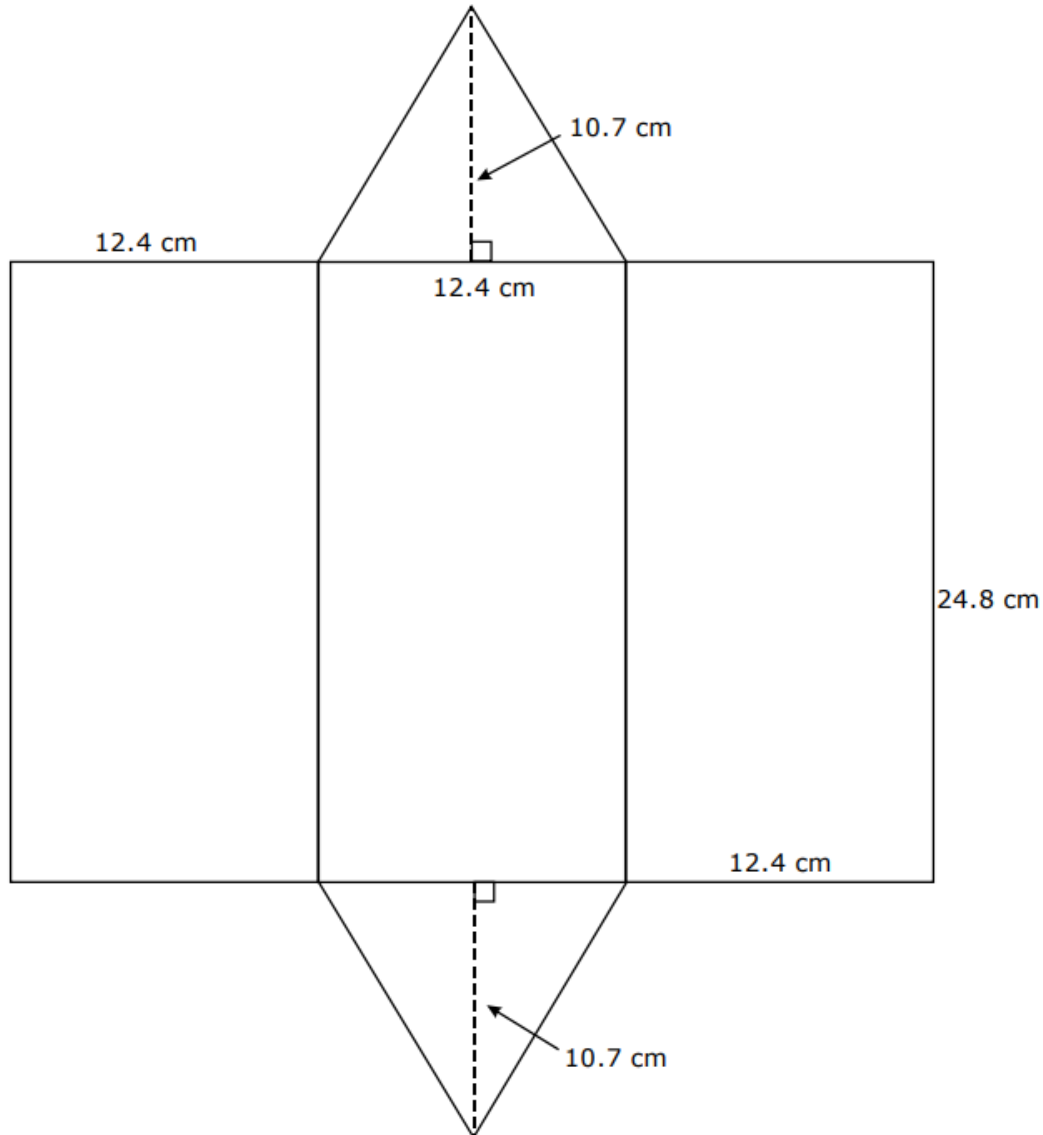
D 26 square inches

- 10 Maurice drew two line segments.
- The first line segment is 6 inches long.
 - The second line segment is 6 centimeters long.
 - One inch is approximately 2.5 centimeters.

Which statement below is true?

- A The first segment is about 9 centimeters longer than the second segment.
- B The first segment is about 6 centimeters longer than the second segment.
- C The first segment is about 3 centimeters longer than the second segment.
- D The first segment is about 3 centimeters shorter than the second segment.
- 11 The ratio of the length of a shorter walkway to the length of a longer walkway is 3 to 5. The length of the shorter walkway is 45 meters. What is the length of the longer walkway?
- A 48 meters
- B 53 meters
- C 72 meters
- D 75 meters
- 12 The ratio of girls to boys in a class is 4 to 1. There are 24 girls in the class. How many students are in the class?
- A 30
- B 29
- C 25
- D 20

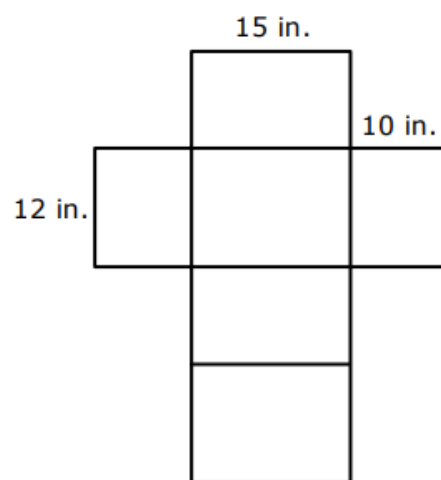
- 13 The net of a triangular prism is shown. The measurements are given to the nearest tenth.



What is the **approximate** surface area of the triangular prism?

- A 748 cm²
- B 989 cm²
- C 1,055 cm²
- D 1,645 cm²

- 14 The net of a right rectangular prism is shown.



What is the surface area of the prism?

- A 450 in.²
- B 900 in.²
- C 1,800 in.²
- D 3,600 in.²

- 15 On an island, there are 37 roads, 14 bicycle trails, and 23 walking trails. What is the ratio of bicycle trails to roads and walking trails?
- A 7 : 30
 - B 9 : 28
 - C 30 : 7
 - D 37 : 4

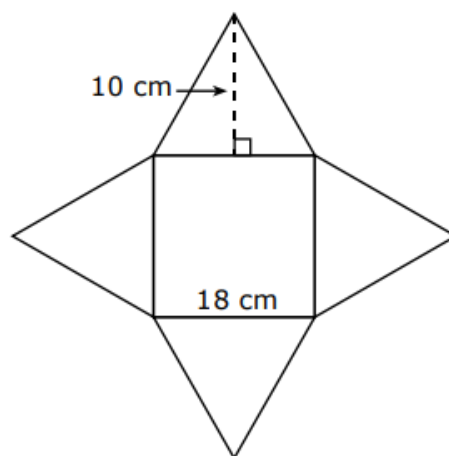
- 16 Pam sells 5 different types of flowers at a farmers' market every Saturday. The table shows the ratio of unsold flowers to the total number of flowers of each type.

Type of Flower	Ratio
F	6 to 30
G	5 to 30
H	5 to 30
J	6 to 30
K	6 to 30

What is the ratio of the total number of flowers sold to flowers unsold?

- A 150 : 28
- B 28 : 150
- C 122 : 150
- D 122 : 28

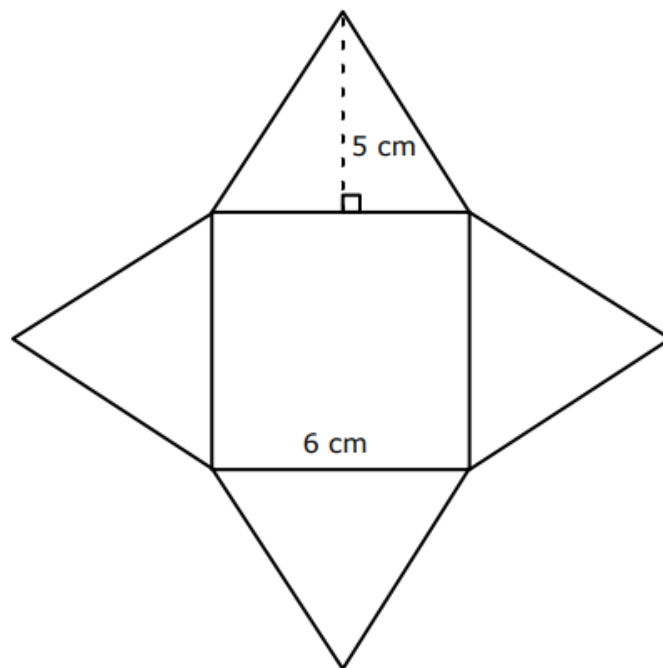
- 17 The figure is a net of a square pyramid.



What is the surface area of the pyramid?

- A 432 cm^2
- B 540 cm^2
- C 684 cm^2
- D $1,044 \text{ cm}^2$

- 18 The net for a square pyramid is shown.

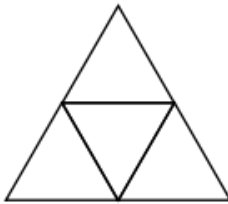


What is the surface area of the pyramid?

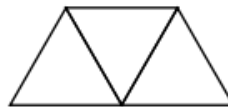
- A 60 square centimeters
- B 96 square centimeters
- C 126 square centimeters
- D 136 square centimeters

19 Which choice is a net of a triangular pyramid?

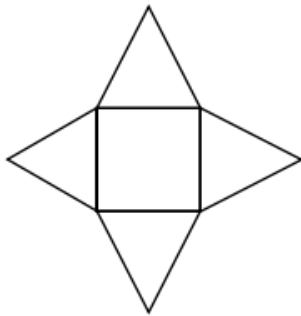
A



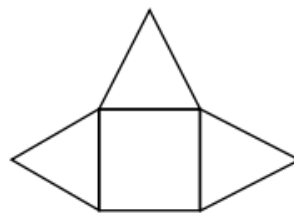
B



C



D



20 Tim has a collection of model cars and boats. He has 3 cars for every 2 boats. He has a total of 12 boats. How many cars are in Tim's collection?

A 8

B 18

C 30

D 72

21 At a middle school, 3 out of every 4 students ride a bus to school. There are 600 students at the school. How many students ride a bus to school?

- A 350
- B 400
- C 450
- D 500

22 What is the greatest common factor of 24 and 36?

- A 18
- B 12
- C 8
- D 4

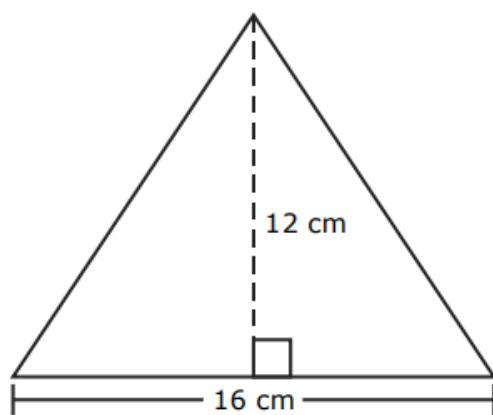
23 Lisa is making fruit baskets.

- She has 12 pears, 30 apples, and 42 oranges.
- For each type of fruit, each basket must have the same number of pieces of that fruit.
- She must use all of the fruit.

What is the greatest number of baskets that Lisa can make?

- A 2
- B 5
- C 6
- D 7

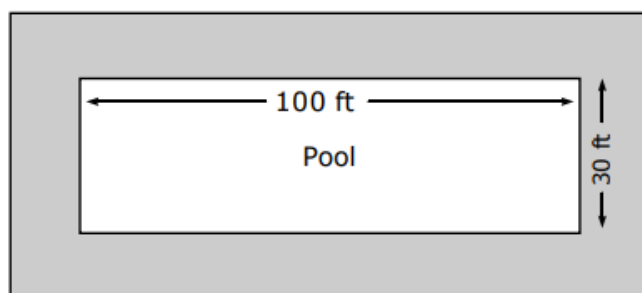
24 A figure is shown.



What is the area of the figure?

- A 28 cm²
- B 56 cm²
- C 96 cm²
- D 192 cm²

- 25 This figure shows a walkway around a swimming pool. The width of the walkway is $4\frac{1}{2}$ ft all the way around.



What is the area of the walkway?

- A 605 ft²
- B 1,251 ft²
- C 2,682 ft²
- D 3,675 ft²

