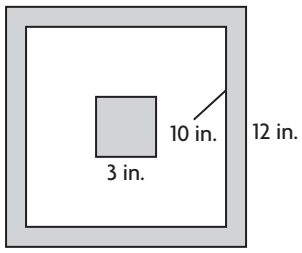
1. For numbers 1a–1e, select Yes or No to indicate if a rectangle with the given dimensions would have a perimeter of 60 inches.

1a.	length: 15 inches	width: 15 inches	○ Yes	○ No
1b.	length: 20 inches	width: 10 inches	○ Yes	○ No
1c.	length: 25 inches	width: 4 inches	○ Yes	○ No
1d.	length: 27 inches	width: 3 inches	○ Yes	○ No
1e.	length: 30 inches	width: 2 inches	○ Yes	○ No

2. Diane made a design using a small square, a medium square, and a large square. She shaded the small square and the outer region.



Part A

What is the area of each of the 3 squares she drew? Show your work.

Part B

What is the area that is shaded? Explain how you found your answer.

GO ON

3. Match the dimensions of the rectangles in the top row with the correct area or perimeter in the bottom row.

length: 6 in. width: 7 in.	length: 5 in. width: 8 in.	length: 7 in. width: 4 in.	length: 7 in. width: 7 in.
area = 40 sq in.	perimeter = 28 in.	area = 42 sq in.	perimeter = 22 in.

4. Karlie painted a portrait. The height of the portrait measures 14 inches. The width is half as long as the height. What is the area of the portrait?

_____ square inches

5. Wilma used 60 centimeters of lace to make a border around a rectangular card. The width of the card is 20 centimeters. What is the length of the card? Use the numbers to write an equation and solve. A number may be used more than once.

10	15	20	30	40	50	60

$P = (2 \times l) + (2 \times w)$

$\square = (2 \times l) + (2 \times \square)$

$\square = (2 \times l) + \square$

$\square = 2 \times l$

$\square = l$

So, the length of the card is $\square$ centimeters.

6. Bill drew a rectangle with a perimeter of 16 inches. Then he tried to draw a square with a perimeter of 16 inches.

Draw 3 different rectangles that Bill could have drawn. Then draw the square, if possible.

GO ON

7. Gretchen and Ed are drawing plans for rectangular play areas. In Gretchen's plan, the play area is 15 feet by 12 feet. In Ed's plan the play area is 14 feet by 14 feet. For numbers 7a–7d, select True or False for each statement.

7a. The area of Ed's play area is 56 square feet. ○ True ○ False

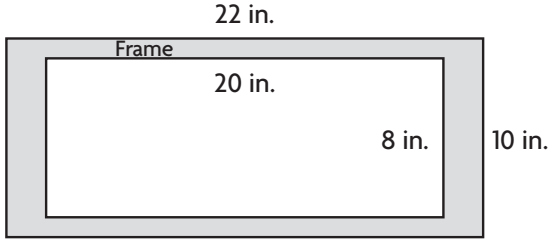
7b. The area of Gretchen's play area is 180 square feet. ○ True ○ False

7c. Gretchen's play area has a greater area than Ed's play area. ○ True ○ False

7d. The area of Ed's play area is 16 square feet greater than Gretchen's. ○ True ○ False

8. Laura bought a square canvas to paint a picture of her cat. One side measures 22 centimeters. What is the area of the canvas? Show your work.

9. Adrian bought a frame for a photograph that he took.



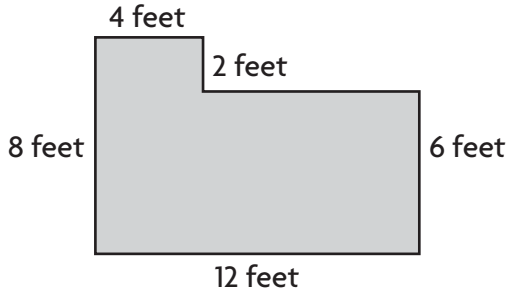
What is the area of the frame?

_____ square inches

10. A farmer has 200 feet of fencing to use for a chicken pen. He wants the width of the pen to be 27 feet. Draw a rectangle that could be the space for the chicken pen. Label the length and the width.

GO ON

11. The diagram shows the dimensions of Anna's laundry room floor.



Use either addition or subtraction to find the area of the floor of the laundry room. Show your work.

12. One wall of Patel's bedroom is 13 feet wide and 8 feet tall. A window on the wall is 3 feet high and 6 feet long. Which statement tells how to find the amount of wallpaper Patel would need to cover this wall? Mark all that apply.

Ⓐ Add $13 + 8 + 3 + 6$.

Ⓑ Add 13×8 and 3×6.

Ⓒ Subtract 18 from 13×8.

Ⓓ Subtract 8×6 from 13×3.

Ⓔ Subtract 13×8 from 3×6.

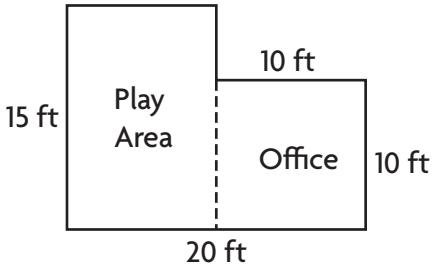
Ⓕ Subtract 3×6 from 13×8.

13. A row of lockers covers 160 square feet of space along a wall. If the lockers are 5 feet tall, what length along the wall do they cover?

_____ feet

GO ON

14. Mr. Benson built a play area for his children and an office for himself.



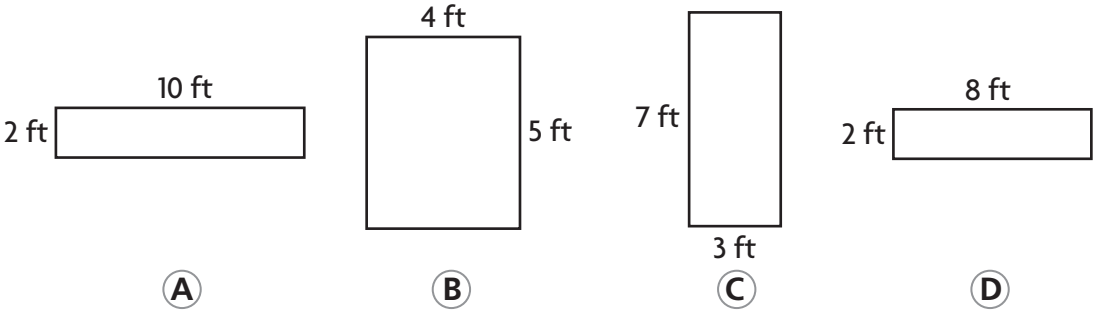
Explain how he can find the amount of carpet he needs to cover the floor in both rooms. Then find the amount of carpet he will need.

15. Workers are fencing off a rectangular construction zone before they begin work. The length of the construction zone is 20 meters. The width of the construction zone is 5 meters less than the length.

How much fence do the workers need to enclose the construction zone? Explain how you found your answer.

GO ON

16. Which rectangle has a perimeter of 20 feet? Mark all that apply.

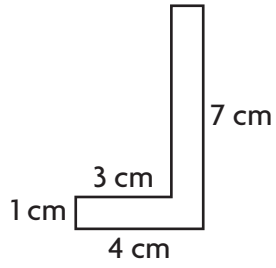


17. A wall is 12 feet long and 8 feet high. Mark hangs a picture on the wall that is 2 feet long and 1 foot wide. Choose the words that correctly complete the sentence.

To find the number of square feet of the wall that is NOT covered by the picture,

multiply add subtract	the	area of the picture width of the wall area of the wall		from by to	the	total area. area of the wall. area of the picture.	

18. Lydia is cutting the shape from a piece of construction paper.



For numbers 18a–18c, select Yes or No to tell whether you can add the products to find the number of square centimeters Lydia needs.

18a.	7×4 and 3×1	○ Yes	○ No
18b.	7×1 and 4×1	○ Yes	○ No
18c.	1×3 and 7×1	○ Yes	○ No

19. The Hernandez family built a backyard patio.

The width and length of the patio are whole numbers. What could be the dimensions of the patio?

Area = 150 square feet