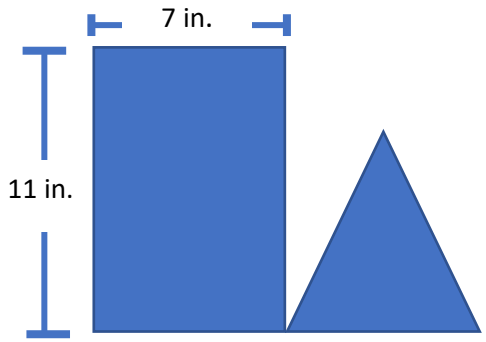
1. The combined perimeter of the rectangle and the triangle is 63 inches. The model shows the dimensions of the rectangle. What is the perimeter in inches of the triangle?



A. 27 in.

B. 45 in.

C. 9 in.

D. 21 in.

2. The length of one edge of a cube is 3 units. What is the volume of this cube in cubic units?

3. Priscilla built a cabinet shaped like a rectangular prism. The length of the base is 9 inches, and the width is 40 inches.

What is the area of the base of the cabinet in square inches?

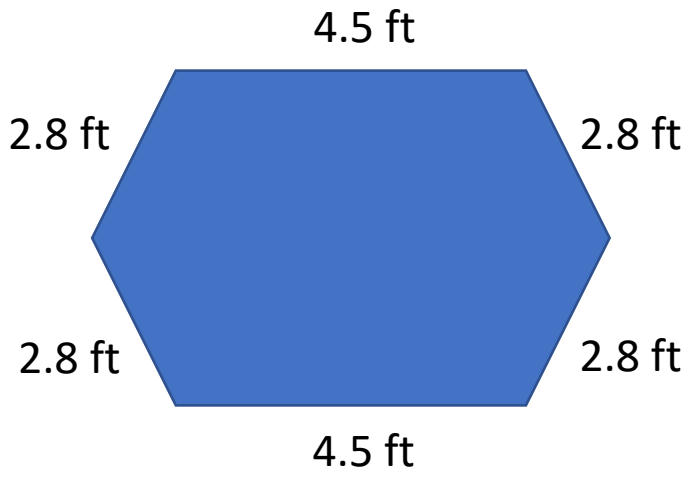
A. 49 square inches

B. 360 square inches

C. 98 square inches

D. Not here

4. A hexagon and its side lengths are shown. What is the perimeter of the hexagon in feet?



Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 1a

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

5. A rectangular billboard is 9.35 meters wide and 6.82 meters tall. What is the perimeter of the billboard in meters?

6. Gabriel bought a dog crate shaped like a rectangular prism with the dimensions shown in the model. What is the area in square inches of the solid floor of the dog crate?

A. 864 square inches

B. 1,080 square inches

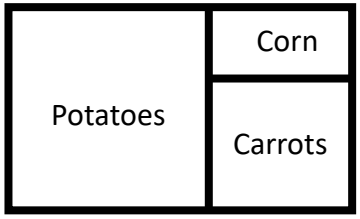
C. 720 square inches

D. 1,296 square inches

7. Phoebe divided her rectangular vegetable garden into three sections, as shown in the drawing below.

- The potato section is a square with a side length of 7 meters.
- The carrot section is a square with a side length of 5 meters.

What is the area, in square meters, of the corn section of Phoebe's garden?



A. 10 square meters

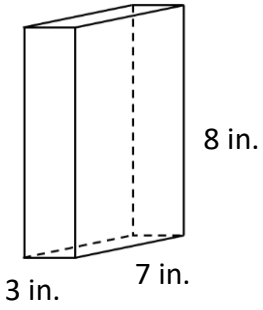
B. 14 square meters

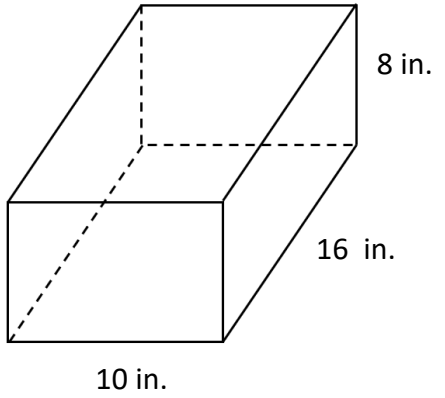
C. 84 square meters

D. 35 square meters

8. Duane packed some books in a box shaped like a rectangular prism. The volume of the box is 168 cubic inches. Which model could represent Duane's box?

A.





C. Neither one.

Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 1b

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

9. A square has a perimeter of 20 centimeters and an area of 25 centimeters. How long is one side of the square?

A. 4 centimeters

B. 5 centimeters

C. 6 centimeters

D. 7 centimeters

10. The base of a rectangular prism has a length of 15 inches and a width of 13 inches. What is the area of this base of the prism in square inches?

11. A rectangular prism has a length of 20 inches, a width of 11 inches and a height of 13 inches. What is the volume in cubic inches of this rectangular prism?

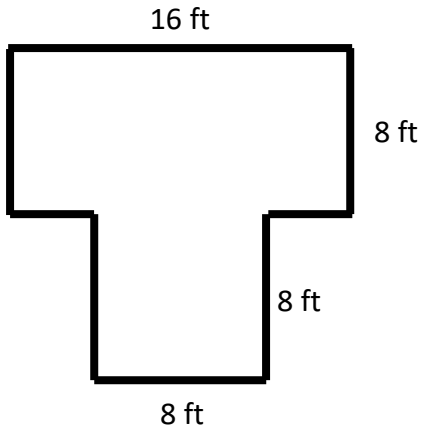
A. 233 cubic inches

B. 2,860 cubic inches

C. 160 cubic inches

D. 88 cubic inches

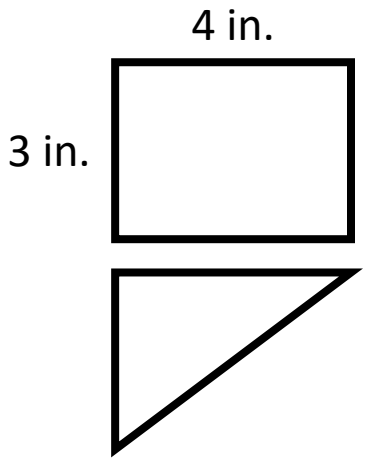
12. Edgar built a deck in his backyard with a section in the shape of a rectangle and a section in the shape of a square. The model shows the dimensions of his deck in feet. What is the area of the deck Edgar built?



Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 2a

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

13. The combined perimeter of the rectangle and the triangle is 26 inches. The model shows the dimensions of the rectangle. What is the perimeter in inches of the triangle?



A. 19 in.

B. 12 in.

C. 24 in.

D. 15 in.

14. The length of one edge of a cube is 5 units. What is the volume of this cube in cubic units?

15. Abigail bought a storage shed shaped like a rectangular prism. The length of the base is 6 feet, and the width is 12 feet.

What is the area of the base of the storage shed in square feet?

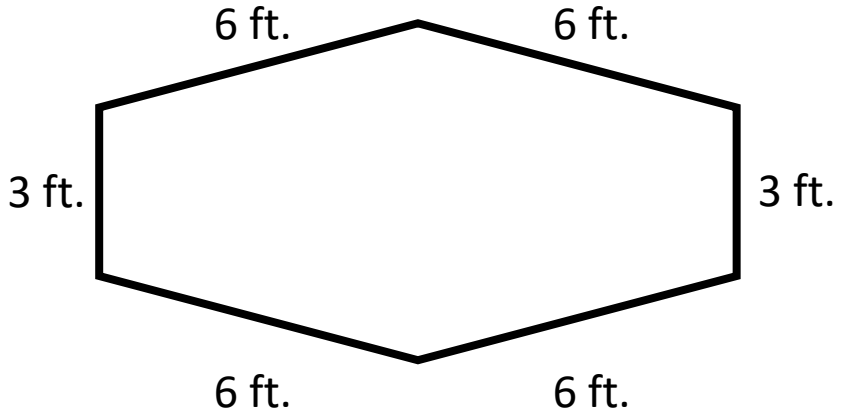
A. 36 square feet

B. 54 square feet

C. 72 square feet

D. Not here

16. A hexagon and its side lengths are shown. What is the perimeter of the Hexagon in feet?



Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 2b

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

17. A square piece of cloth is 10.75 inches wide. What is the perimeter of the piece of cloth in inches?

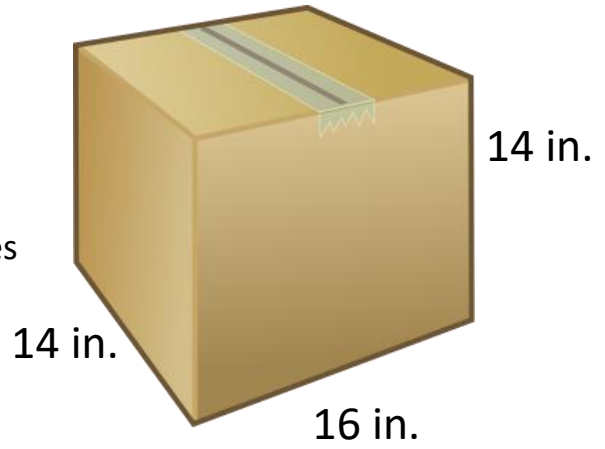
18. Marcy got a box in the mail with the dimensions shown. What is the area in square inches of the bottom of box?

A. 60 square inches

B. 188 square inches

C. 224 square inches

D. 3,136 square inches



19. Phillip built a large rectangular dollhouse with three rooms.

- The bedroom is a square with a side length of 4 feet.
- The living room is a square with a side length of 6 feet.

What is the area in square feet of the kitchen?

A. 6 square feet

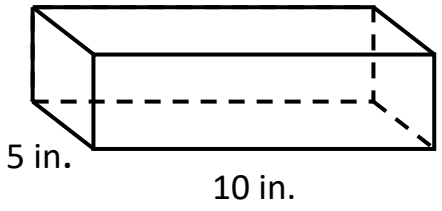
B. 8 square feet

C. 10 square feet

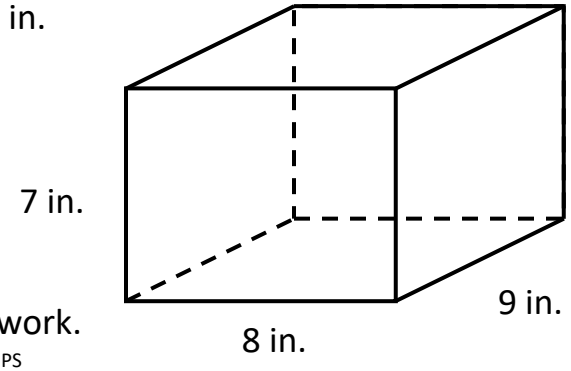
D. 12 square feet

20. Marilyn needs a box to mail some presents to her family. The box needs to have a volume of at least 300 Cubic inches. Which of these boxes could Marilyn use?

A.



B.



C. Either box would work.

Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 3a

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

21. A square has a perimeter of 24 centimeters and an area of 36 centimeters. How long is one side of the square?

A. 4 centimeters

B. 5 centimeters

C. 6 centimeters

D. 7 centimeters

22. The base of a rectangular prism has a length of 12 inches and a width of 14 inches. What is the area of this base of the prism in square inches?

23. A rectangular prism has a length of 30 inches, a width of 12 inches and a height of 15 inches. What is the volume in cubic inches of this rectangular prism?

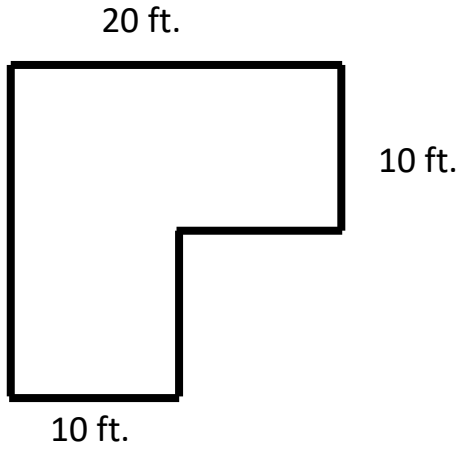
A. 57 cubic inches

B. 360 cubic inches

C. 450 cubic inches

D. 5,400 cubic inches

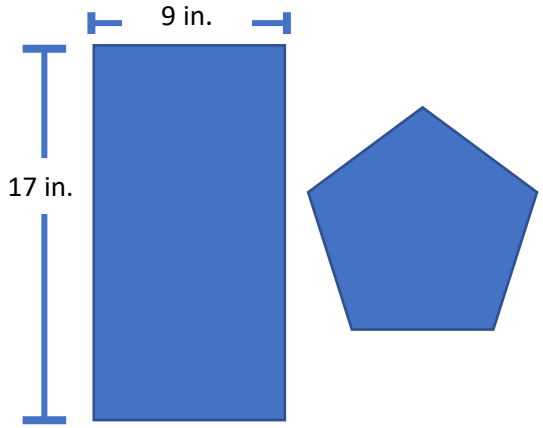
24.Moe built a pool in his backyard with a section in the shape of a rectangle and a section in the shape of a square. The model shows the dimensions of the pool in feet. What is the area of the pool that Moe built?



Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 3b

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

25. The combined perimeter of the rectangle and the pentagon is 97 inches. The model shows the dimensions of the rectangle. What is the perimeter in inches of the pentagon?



A. 27 in.

B. 45 in.

C. 56 in.

D. 21 in.

26. The length of one edge of a cube is 2 units. What is the volume of this cube in cubic units?

27. Bernie built a toy box shaped like a rectangular prism. The length of the base is 24 inches, and the width is 20 inches.

What is the area of the base of the toy box in square inches?

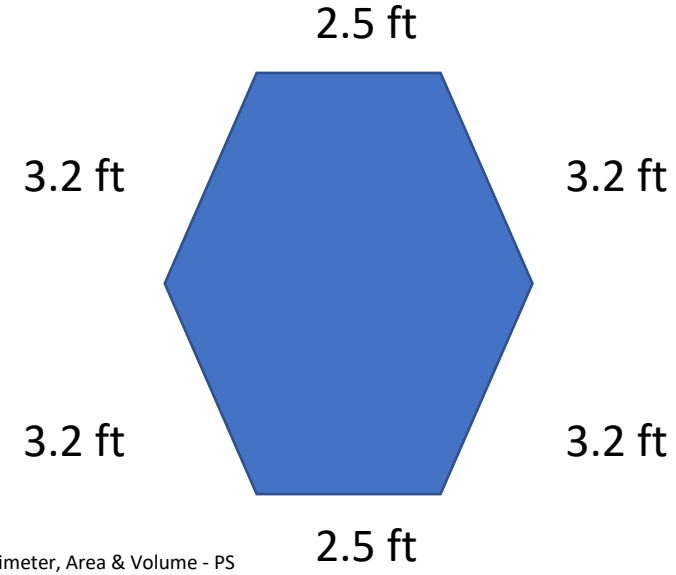
A. 480 square inches

B. 88 square inches

C. 98 square inches

D. Not here

28. A hexagon and its side lengths are shown. What is the perimeter of the hexagon in feet?



Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 4a

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
13 B. 12 inches	**14** 125 cubic units	**15** C. 72 square feet	**16** 30 feet
17 43 inches	**18** C. 224 square inches	**19** B.8 square feet	**20** B
21 C. 6 centimeters	**22** 168 square inches	**23** D. 5,400 cubic inches	**24** 300 square feet
25 B. 45 inches	**26** 8 cubic units	**27** 480 Square inches	**28** 17.8 feet
29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A

29. A rectangular carpet has one side that is 7.45 feet and one side that is 5.25 feet. What is the perimeter of the carpet in feet?

30. Louie the Lion Tamer bought a new cage for his lion. The floor of the cage has the dimensions shown. What is the area of the floor of the cage?

A. 126 square feet

B. 45 square feet

C. 22.5 square feet

D. 1,260 square feet

31. Marty divided his rectangular dresser drawer into three sections, as shown in the drawing below.

- The sock section is a square with a side length of 12 inches.
- The T-shirt section is a square with a side length of 20 inches.

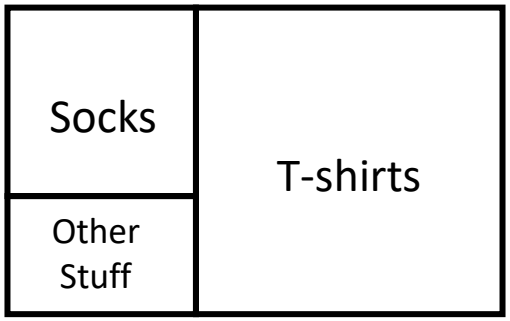
What is the area, in square inches, of the section Marty is saving for other stuff?

A. 20 square inches

B. 40 square inches

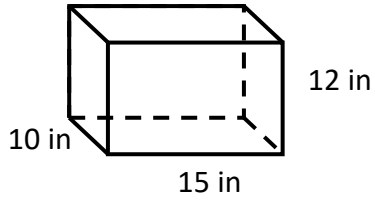
C. 64 square inches

D. 96 square inches

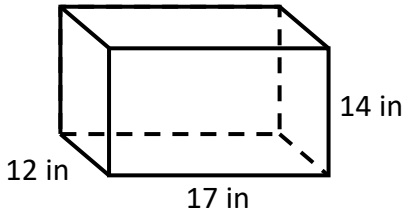


32. Frenchie is packing a box to take on a trip to Europe. She wants to take the smallest box possible, but it must hold at least 1,600 cubic inches. Which box should Frenchie use?

A.



B.



C. Neither one is big enough.

Unit: 5th – Perimeter, Area & Volume
Lesson: 5.4.H – Perimeter, Area & Volume
Problem Set 4b

1 A. 27 inches	**2** 27 cubic units	**3** B. 360 square inches	**4** 20.2 feet
5 32.34 meters	**6** A. 864 square inches	**7** A. 10 square meters	**8** A
9 B. 5 centimeters	**10** 195 square inches	**11** B. 2,860 cubic inches	**12** 192 square feet
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29 25.4 feet	**30** A. 126 square feet	**31** D. 96 square inches	**32** A