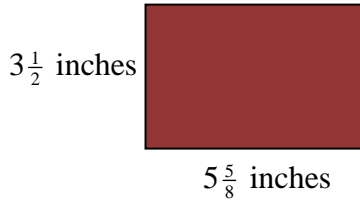


# Block 6 Review ~ Area and Volume

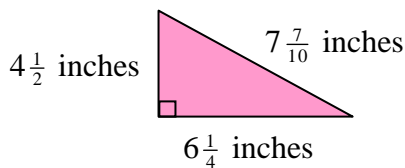
Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

1. Using the given measurements, what is the area of the rectangle below?



- A.  $15\frac{5}{16}$  square inches
- B.  $18\frac{1}{4}$  square inches
- C.  $19\frac{11}{16}$  square inches
- D.  $20\frac{7}{8}$  square inches

2. Using the given measurements, what is the area of the triangle below?



- A.  $10\frac{3}{4}$  square inches
- B.  $14\frac{1}{16}$  square inches
- C.  $18\frac{9}{20}$  square inches
- D.  $28\frac{1}{8}$  square inches

For numbers 3a – 3c, determine whether each statement is TRUE or FALSE.



To find the area of the square above, multiply...

- 3a.  $3\frac{1}{4} \times 3\frac{1}{4} \times 3\frac{1}{4} \times 3\frac{1}{4}$       TRUE    FALSE
- 3b.  $3\frac{1}{4} \times 4$                                       TRUE    FALSE
- 3c.  $3\frac{1}{4} \times 3\frac{1}{4}$                                     TRUE    FALSE

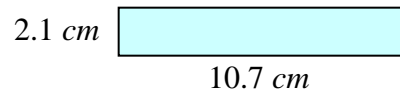
4. Yani walked the perimeter of a square patio that was 5.3 meters on each side. What is the distance that Yani walked?

- A. 21.2 meters
- B. 28.09 meters
- C. 30.12 meters
- D. 39.6 meters

5. Which rectangles have a perimeter of 288.6 meters? Circle all that apply.

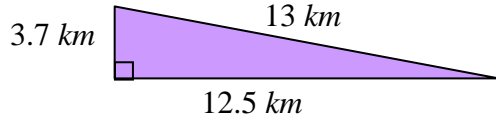
<p>A. 52.5 m  91.5 m</p>	<p>B. 72.1 m  72.1 m</p>
<p>C. 54.3 m  90 m</p>	<p>D. 117.9 m  26.4 m</p>
<p>E. 64.1 m  80.2 m</p>	<p>F. 41.9 m  103 m</p>

6. What is the area in square centimeters of the rectangle below?



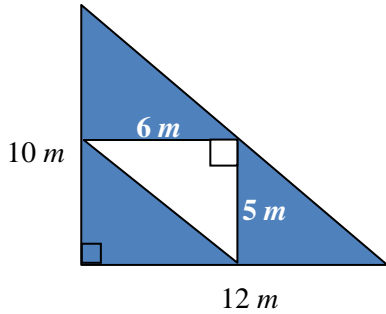
- A. 12.8 square centimeters
- B. 15.53 square centimeters
- C. 22.47 square centimeters
- D. 25.6 square centimeters

7. What is the area in square kilometers of the triangle below?



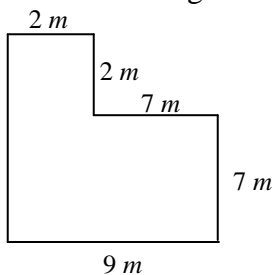
- A. 23.125 square kilometers
- B. 28.48 square kilometers
- C. 36.35 square kilometers
- D. 46.25 square kilometers

8. What is the area of the shaded region?



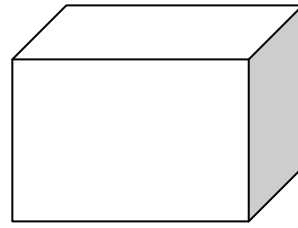
- A. 30 square meters
- B. 45 square meters
- C. 60 square meters
- D. 120 square meters

9. Find the area of the figure below.



- A. 67 square meters
- B. 65 square meters
- C. 53 square meters
- D. 51 square meters

10. What is the name of the solid shown?

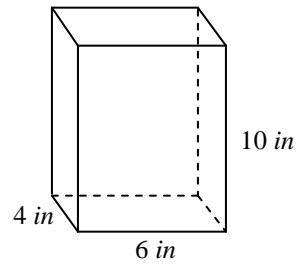


- A. Pyramid
- B. Cube
- C. Rectangle
- D. Prism

For numbers 11a – 11e, choose YES or NO to indicate whether each solid has a flat base.

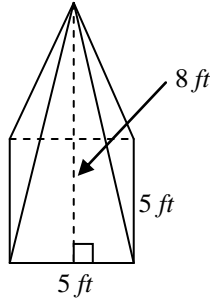
- |               |     |    |
|---------------|-----|----|
| 11a. Cone     | YES | NO |
| 11b. Cylinder | YES | NO |
| 11c. Sphere   | YES | NO |
| 11d. Pyramid  | YES | NO |
| 11e. Prism    | YES | NO |

12. What is the surface area of the prism?



- A. 248 square inches
- B. 240 square inches
- C. 40 square inches
- D. 20 square inches

13. What is the surface area of the square pyramid?



- A. 80 square feet
- B. 105 square feet
- C. 140 square feet
- D. 185 square feet

14. Jake made a box that was  $1\frac{1}{3}$  yards long,  $\frac{1}{2}$  yard wide and  $\frac{1}{2}$  yard tall. Which expression below should Jake use to find the volume of his box?

- A.  $1\frac{1}{3} \times \frac{1}{2} \times \frac{1}{2}$
- B.  $\frac{1}{2} + 1\frac{1}{3} + \frac{1}{2}$
- C.  $\frac{1}{2} \times \frac{1}{2} + 1\frac{1}{3}$
- D.  $\frac{1}{2} + \frac{1}{2} \times 1\frac{1}{3}$

15. A box has a length of 2 feet, a width of  $\frac{3}{8}$  foot and a height of  $\frac{1}{3}$  foot. What is the volume of this box?

- A.  $2\frac{17}{24}$  cubic feet
- B.  $2\frac{1}{4}$  cubic feet
- C.  $\frac{6}{11}$  cubic foot
- D.  $\frac{1}{4}$  cubic foot

16. Pete wanted to fill a rectangular form with cement. The form measured  $2\frac{1}{3}$  yards long,  $1\frac{1}{2}$  yards wide and  $\frac{1}{2}$  yard tall. How many cubic yards of cement will Pete need to fill the form?

- A.  $1\frac{3}{4}$  cubic yards
- B.  $3\frac{1}{12}$  cubic yards
- C.  $4\frac{1}{3}$  cubic yards
- D. 5 cubic yards