1. A rectangular prism is 6 cm long, 2 cm wide, and 9 cm high. Find the surface area of the prism.

[A]
$$168 \text{ cm}^2$$

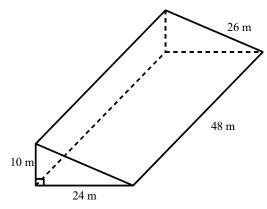
- 2. Find the lateral area and surface area of an equilateral triangle base right prism with base edge 5 and height 9.
- 3. A rectangular prism is 12 cm long, 10 cm wide, and 6 cm high. Find the surface area of the prism.

- 4. When you quadruple the dimensions of a rectangular prism, its surface area
 - [A] becomes 16 times greater.
 - [B] becomes 64 times greater.
 - [C] is $\frac{1}{8}$ of the original figure.
 - [D] is none of these.

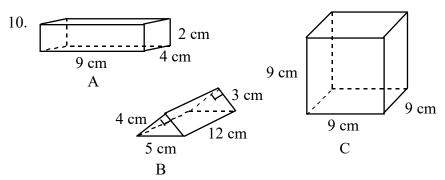
- 5. The design for a rectangular box has width *x*, length 2*x*, and height 3 in. Compare the surface area of the box to its volume. Write your answer as a rational expression.
- 6. Rhonda is building a cube with no top to hold magazines. Each side is square 18 in. by 18 in. She wants to cover all sides, inside and out, with fabric. How many square yards will she need?
- 7. A florist makes a box for small orchids that is 15 cm by 15 cm by 15 cm. On one base, the box has three trapezoidal flaps. The flaps have longer bases that are 15 cm, shorter bases that are 13 cm, and are 2 cm high. How many square centimeters are used for each box?
- 8. Find the surface area of the figure represented by the following foundation drawing made up of unit cubes.

4	5	
5	6	6
3	8	5

9. Calculate the surface area of the right triangular prism.



- [A] 2880 m²
- [B] 5760 m²
- [C] 11520 m²
- [D] 3120 m²



The surface area of Prism C above is _____ the surface area of Prism A.

- [A] less than half
- [B] greater than half
- [C] equal to
- [D] half

- [1] A
- [2] Lateral area: 135, Surface area: $135 + \frac{25}{2}\sqrt{3}$
- [3] <u>B</u>
- [4] A
 - 2x+9
- [5] 3x
- [6] 2.5 yd²
- [7] 1434 cm²
- [8] 92 square units
- [9] D
- [10] B