



Math Virtual Learning

Geometry

April 21, 2020

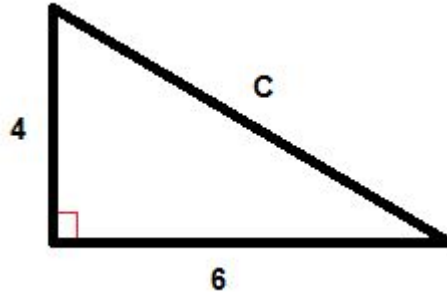


Geometry

Lesson: April 21, 2020

Objective/Learning Target:
Calculate the surface area of regular prisms

Bell Ringer: Find the area of the triangle.
(Hint: $A = \frac{1}{2} * b * h$)





Bell Ringer Answer: 12 square centimeters

Let's Get Started: Go through the following slides and try the example problems.

DEFINITIONS:

Prism: Polyhedron with two parallel, congruent bases.

Surface Area: Sum of the area of each face of the solid.



Surface Area of a Prism:

$$SA = 2B + PH$$

B = area of the base

P = perimeter of the base

H = height of the prism

Example Problem: Find the surface area of the prism.

$$SA = 2B + PH$$

$$SA = 2(30) + (22)(7)$$

$$SA = 60 + 154$$

$$SA = 214 \text{ square meters}$$

B = area of the base

$$B = b \times h$$

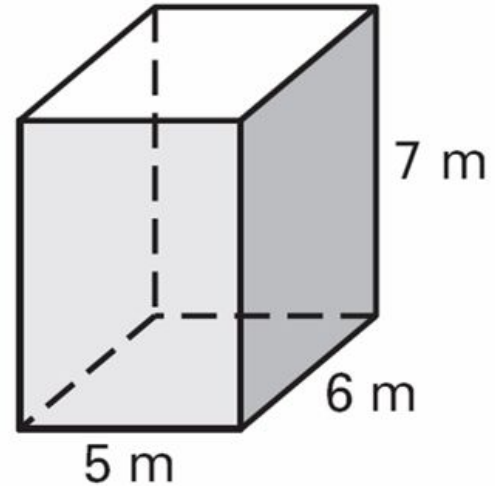
$$B = (5)(6)$$

B = 30 square meters

P = perimeter of the base

$$P = 5 + 5 + 6 + 6$$

$$P = 22 \text{ meters}$$

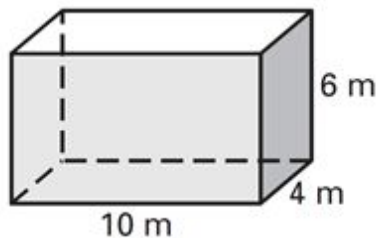


H = height of the prism

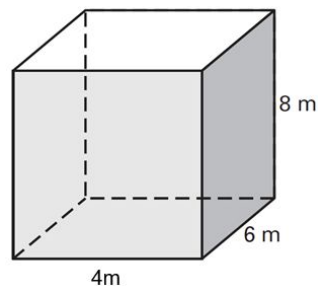
$$H = 7 \text{ meters}$$

Try the next practice problems on your own! Find the surface area of each prism.

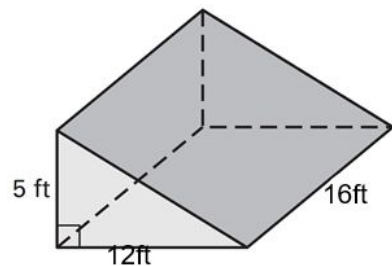
1)



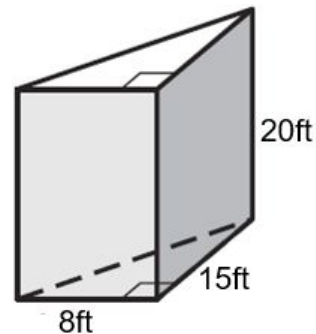
2)



3)



4)



Answer Key:

Here you will find the answers to the previous four questions.
Check your answers below.

- 1) 248 square meters
- 2) 208 square meters
- 3) 540 square meters
- 4) 920 square meters



Additional Resources:

Click on the link below to get additional practice and to check your understanding!

[Surface Area of Prisms Practice](#)

[Answers](#)