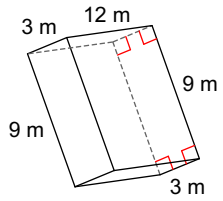
Math 9: Unit 4 Measurement Name Answers

Homework 4.2: Prisms and Cylinders.

Date_____

Find the surface area of each figure.

1)

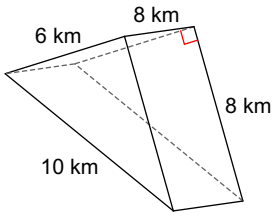


$\ell = 9$
$w = 12$
$h = 3$

$SA = 342 m^2$

$V = 324 m^3$

2)

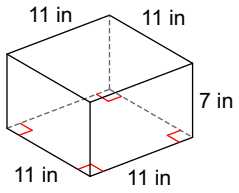


$b = 6$
$h = 8$
$\ell = 8$
$P = 24$

$SA = 240 km^2$

$V = 192 km^3$

3)

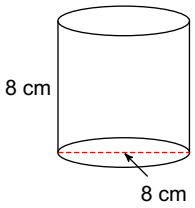


$\ell = 11$
$w = 11$
$h = 7$

$SA = 550 in^2$

$V = 847 in^3$

4)

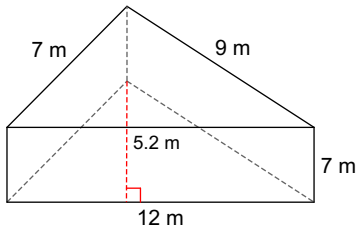


$r = 4$ $h = 8$

$SA = 301.59 cm^2$

$V = 401.92 cm^3$

5)

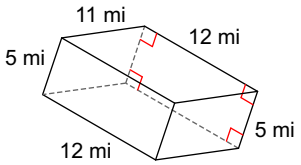


$b = 12$
$h = 5.2$
$\ell = 7$
$P = 21.2$

$SA = 258.4 m^2$

$V = 218.4 m^3$

6)

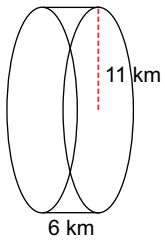


$\ell = 12$
$w = 11$
$h = 5$

$SA = 494 mi^2$

$V = 660 mi^3$

7)



$r = 11$
$h = 6$

$SA = 1174.96 km^2$

$V = 2279.64 km^3$

8) a) A triangular prism has a volume of $2184 cm^3$ with a height of $13 cm$ and a base of $12 cm$. Determine the length of the prism.

$\ell = 14 cm$

b) A cylinder with a $12 ft$ radius has a surface area of $1432.57 ft^2$. Determine the height of the cylinder.

$h = 7 ft$