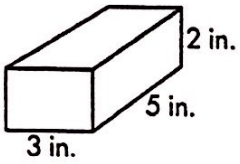
NAME _____

Lesson 6.6 Surface Area: Rectangular Solids

Find the surface area of each rectangular solid.

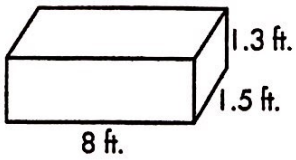
1.

a



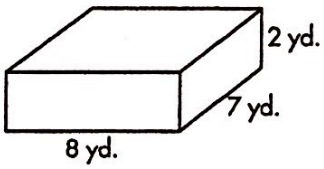
SA = _____ sq. in.

b



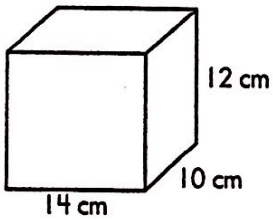
SA = _____ sq. ft.

c

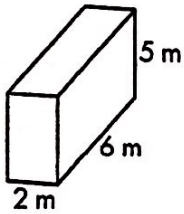


SA = _____ sq. yd.

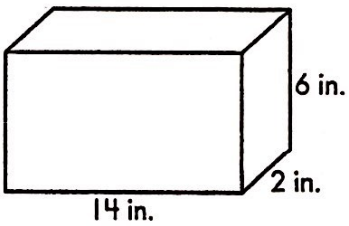
2.



SA = _____ sq. cm

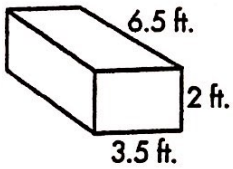


SA = _____ sq. m

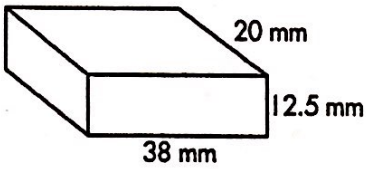


SA = _____ sq. in.

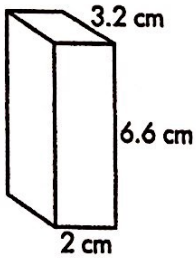
3.



SA = _____ sq. ft.



SA = _____ sq. mm

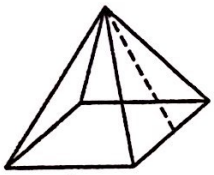


SA = _____ sq. cm

NAME _____

Lesson 6.7 Surface Area: Pyramids

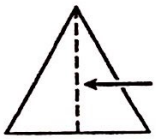
The **surface area** of a solid is the sum of the areas of all surfaces of the solid. The surface area of a square pyramid is the sum of the area of the square base and each of the 4 triangular sides.



side

Each triangle's area is $\frac{1}{2}$ base × height. In a pyramid, **base** refers to the side length and **height** refers to the slant height, or length. So surface area or $SA = (\text{side} \times \text{side}) + 4(\frac{1}{2}\ \text{side} \times \text{length})$.

$SA = s^2 + 2s\ell$ SA is given in **square units**, or **units²**.



slant height, or *length* (ℓ) of the side

If $s = 6$ cm and $\ell = 10$ cm, what is the surface area?

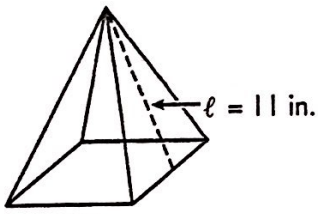
$SA = s^2 + 2s\ell$

$SA = 6^2 + 2 \times 6 \times 10 = 36 + 120 = 156\ \text{cm}^2$

Find the surface area of each square pyramid.

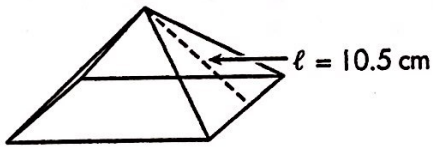
a b c

1.



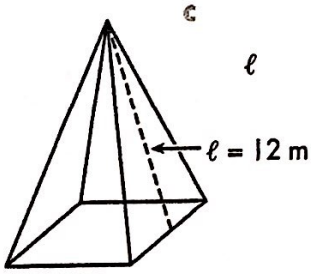
s = 8 in.

SA = _____ in.²



s = 15 cm

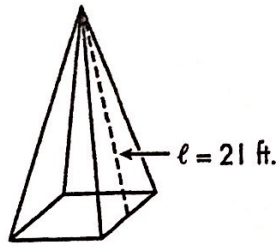
SA = _____ cm²



s = 7 m

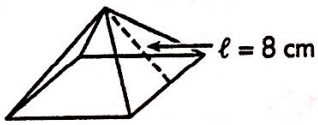
SA = _____ m²

2.



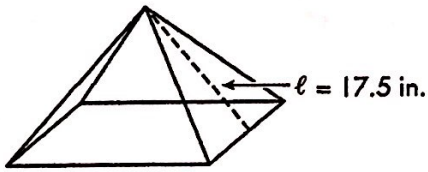
s = 9 ft.

SA = _____ ft.²



s = 10 cm

SA = _____ cm²



s = 22 in.

SA = _____ in.²