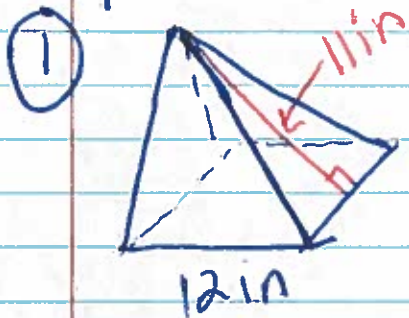


Day 82

11.3 S.A. Pyramids & Cones

p. 620



$l = 11 \text{ in}$ (slant height)

Pyramid

$$S.A. = \text{area base} + \frac{1}{2} l \cdot P$$

Perimeter of Base

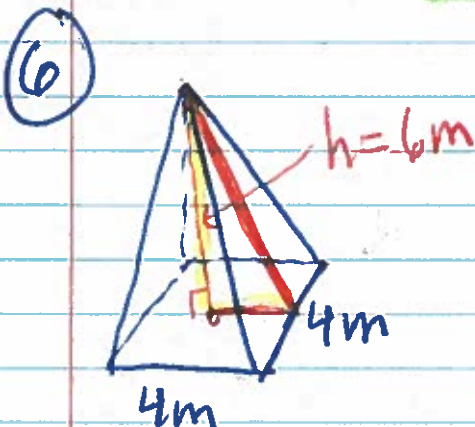
Base Square

Area = side \cdot side
 $12 \cdot 12$
 144

$$S.A. = 144 + \frac{1}{2} \cdot 11 \cdot 48$$

$$S.A. = 408 \text{ in}^2$$

Perimeter = $4 \cdot 12$
 48



area base

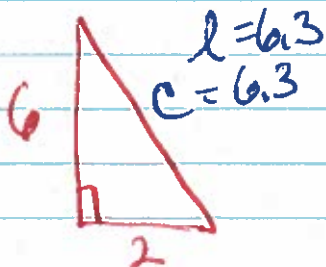
Perimeter of base

$$S.A. = 16 + \frac{1}{2} (6 \cdot 3) \cdot 16$$

$$S.A. = 16 + 50.4$$

lateral area

$$S.A. = 66.4 \text{ m}^2$$



$$2^2 + 6^2 = c^2$$

$$4 + 36 = c^2$$

$$\sqrt{40} = \sqrt{c^2}$$

$$6.3 = c$$

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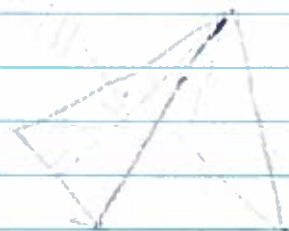
11.8 S.A. Pyramids & Cones

6.9.9

(Area of base) =

Pyramid

$$S.A. = \text{Area} + \frac{1}{2} P$$



(1)

Pyramid

Pyramid

$$S.A. = \text{Area} + \frac{1}{2} P$$

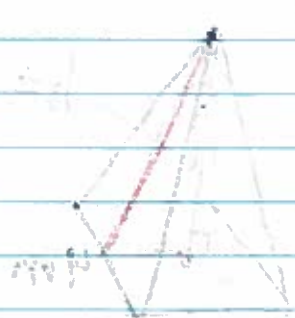
$$S.A. = \text{Area} + \frac{1}{2} P$$

$$S.A. = \text{Area} + \frac{1}{2} P$$

Pyramid

$$S.A. = \text{Area} + \frac{1}{2} P$$

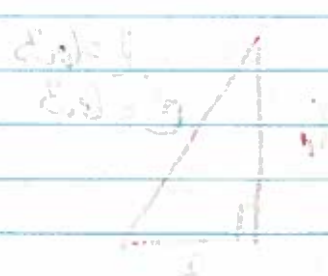
$$S.A. = \text{Area} + \frac{1}{2} P$$



(2)

$$S.A. = \text{Area} + \frac{1}{2} P$$

$$S.A. = \text{Area} + \frac{1}{2} P$$



Find Slant height 1st!

Surface Area and

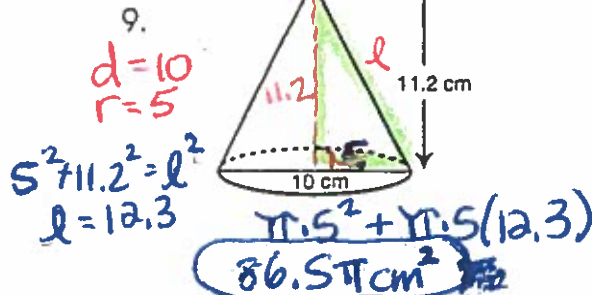
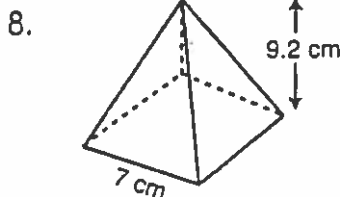
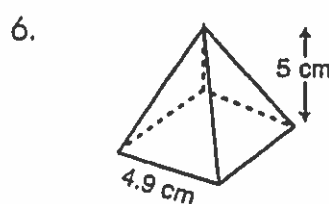
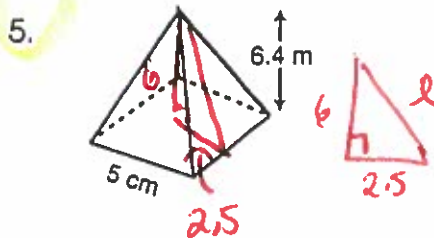
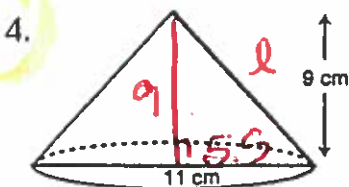
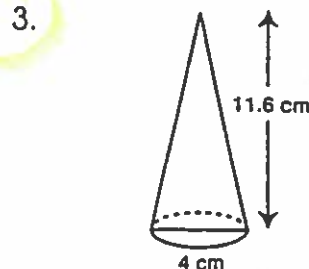
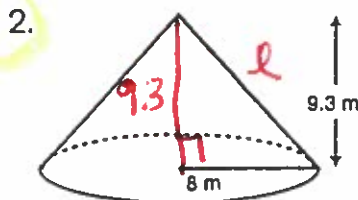
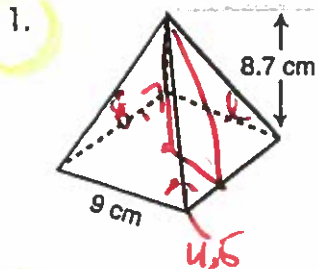
Skill: volume of pyramids and cones

11.3 Surface Area

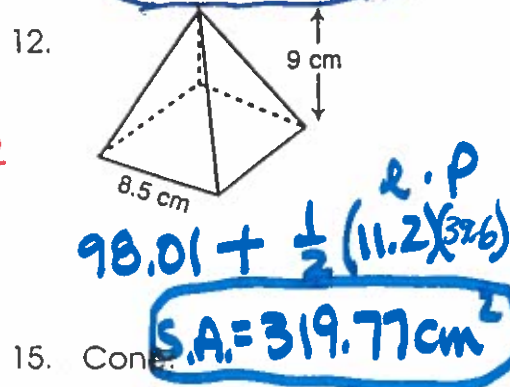
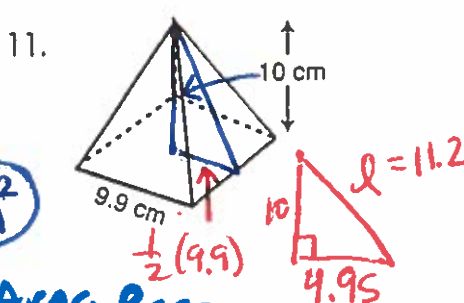
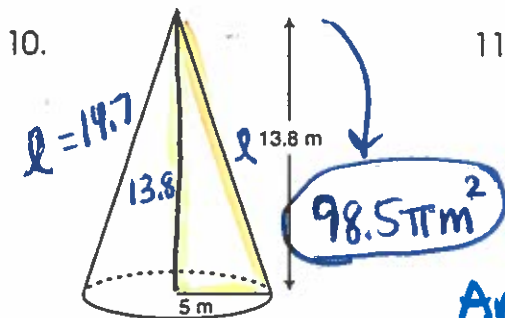
11.5 Volume

Name _____

Find the **S.A.** of each pyramid and cone. Use 3.14 for π and round to the nearest hundredth.



work: $\pi \cdot 5^2 + \pi \cdot 5 (12.3)$



13-18 Find Volume.

13. Pyramid:
area of base = 98 m
h = 11 m
V =

14. Cone:
d = 12 m
h = 10.5 m
V =

15. Cone:
r = 5.5 cm
h = 6 cm
V =

16. Cone:
r = 3.4 cm
h = 8.1 cm
V =

17. Pyramid:
area of base = 27.5 mm
h = 7 mm
V =

18. Pyramid:
area of base = 42.25 cm
h = 9.8 cm
V =

Only Pyramids

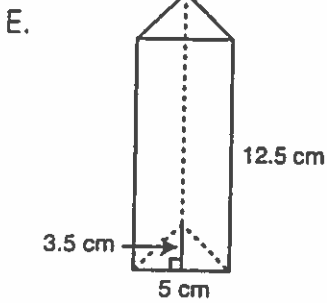
Surface Area 11.3

Skill: surface area of triangular prisms and square pyramids

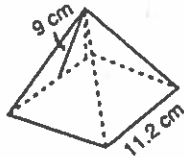
Name _____

Why didn't the elephant buy a Corvette?

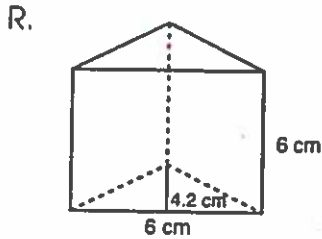
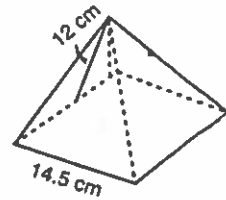
To find out, find the surface area for each figure. Then, find the answer at the bottom of the page and put the corresponding letter above each answer.



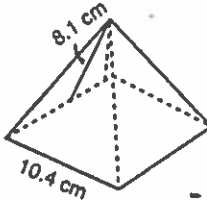
N.



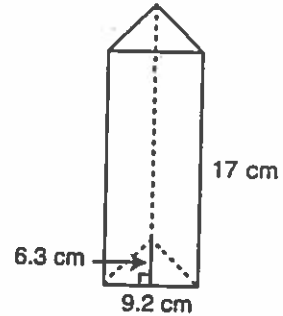
P.



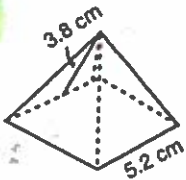
O.



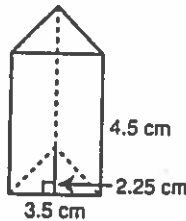
A.



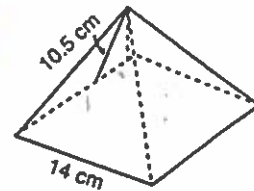
T.



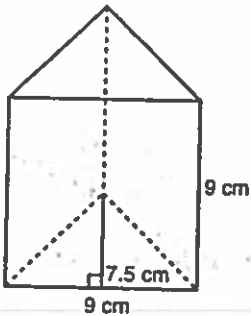
N.



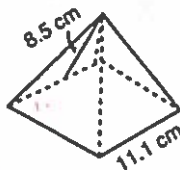
S.



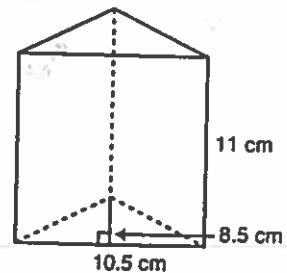
U.



C.



K.



55.125 cm²

276.64 cm²

66.56 cm²

133.2 cm²

310.5 cm²

327.04 cm²

435.75 cm²

490 cm²

558.25 cm²

527.16 cm²

311.91 cm²

205 cm²

Rectangle
all properties of parallelograms plus
—all diagonals are congruent
—all angles measure 90°

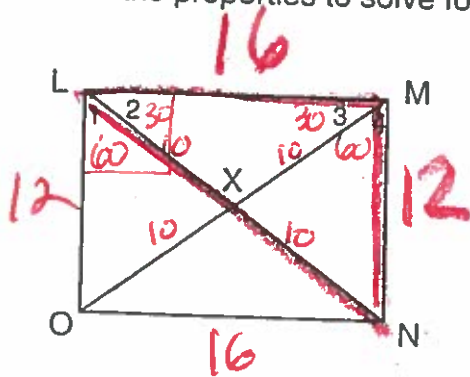
Rhombus
all properties of parallelograms plus
—all sides are congruent
—all diagonals are perpendicular
—all diagonals bisect opposite angles

Square
all properties of
—parallelogram
—rectangle
—rhombus

Name: _____

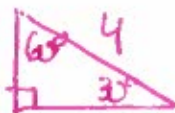
Date: _____ B _____

Use the properties to solve for the missing measures in the diagrams.



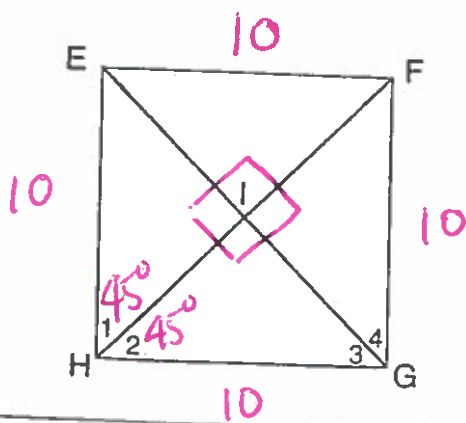
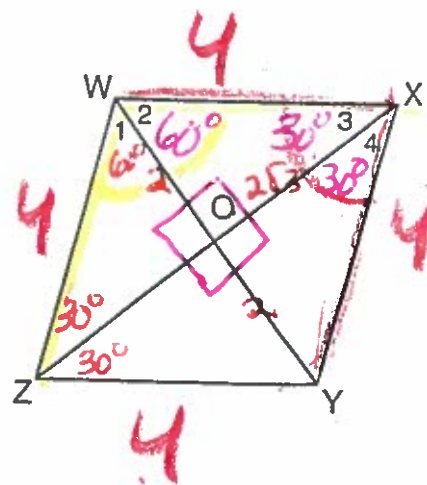
1. LMNO is a rectangle. If $LM = 16$, $MN = 12$, and $\angle 1 = 60^\circ$, find the following:

- a. $ON = 16$ d. $LX = 10$ g. $OX = 10$
 b. $OL = 12$ e. $\angle LON = 90$ h. $\angle 3 = 30$
 c. $LN = 20$ f. $\angle 2 = 30$ i. $\angle 4 = 60$



2. WXYZ is a rhombus. If $WX = 4$ and $\angle WXY = 60^\circ$, find the following:

- a. $XY = 4$ d. $\angle 2 = 60^\circ$ g. $WO = 2$
 b. $\angle ZWX = 120$ e. $\angle 3 = 30$ h. $OX = 2\sqrt{3}$
 c. $\angle 1 = 60$ f. $\angle 4 = 30$ i. $WY = 4$



3. EFGH is a square. If $EF = 10$, find the following:

- a. $FG = 10$ d. $EI = 5\sqrt{2}$ g. $\angle 1 = 45^\circ$
 b. $\angle EFG = 90^\circ$ e. $IF = 5\sqrt{2}$ h. $\angle 3 = 45^\circ$
 c. $EG = 10\sqrt{2}$ f. $\angle EIF = 90^\circ$ i. $HF = 10\sqrt{2}$

