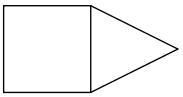
ADV MATH 7: Unit 7 Test Review Name:_____

SHOW WORK FOR ALL PROBLEMS. PLACE ANSWER IN CORRESPONDING BOX.

Formulas	Surface Area	Volume
Prism	SA = ph + 2B	V=Bh
Cylinder	SA = $2\pi rh+2\pi r^2$	
Square Pyramid	SA = 2bl + B	V = $\frac{1}{3}Bh$
Cone	SA = πrl + B	
Sphere		V = $\frac{4}{3}\pi r^3$

1) This is an incomplete net for a square pyramid. What shapes do you add to complete the net?



a. 3 triangles
b. 2 squares
c. 1 triangle and 3 squares
d. 1 triangle and 2 squares

2) What is the circumference of a circle with a diameter of 8 inches?

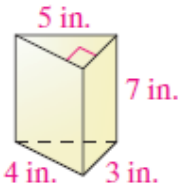
a. 4π inches
b. 8π inches
c. 16π inches
d. 64π inches

3) If a circle has a circumference of 50π inches, what is the length of the radius?

4) A dinner plate has a radius of 5 inches. A salad plate has a radius of 3.75 inches. How much greater is the dinner plate's circumference than the salad plate? Round to nearest tenth.

5a) What is the shape of the cross section that results from slicing a triangular prism parallel to the base?

b) Find the area of this cross section.



6) What is the supplement of 124 degrees?

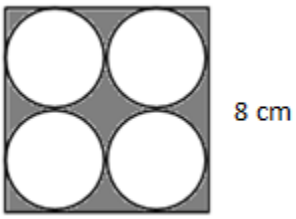
7) What is the complement of 82 degrees?

8) In triangle ABC, the measure of angle A is 42 degrees. Angle B has a measure of 60 degrees. What is the measure of angle C?

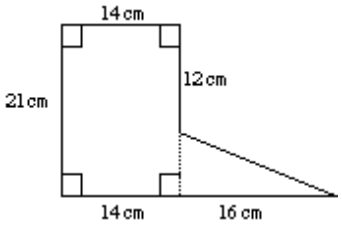
9) How far from the base of the house do you need to place a 15-foot ladder so that it exactly reaches the top of a 12-foot tall wall?

Answers
1
2
3
4
5 a. _____ b. _____
6
7
8
9

10) Find the area (rounded to the nearest tenth) of the shaded region.



11) Find the area of the irregular figure.



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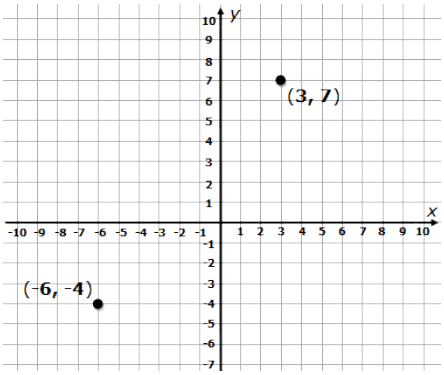
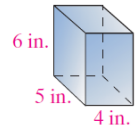
12

12. Find the distance between the points using Pythagorean Theorem. If necessary, round to nearest tenth.



Find the surface area of each solid. Round to the nearest tenth.

13.



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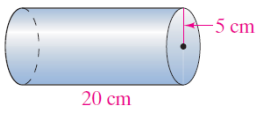

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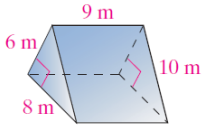

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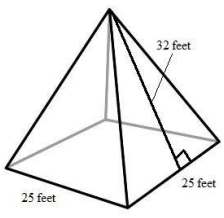
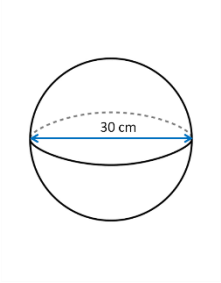


13.
14.
15.
16.

Find the volume of each solid. Round to the nearest tenth.

17.



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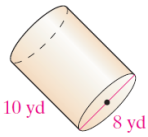

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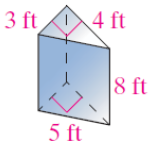

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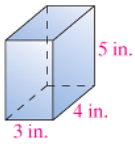

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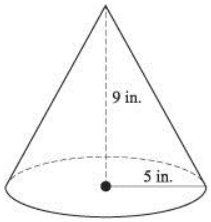

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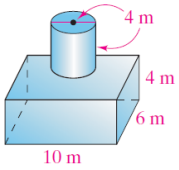

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