

Name: _____

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Instructor: _____

Date: _____

Class Time: _____

Unit 3 Module A Notes Sections 1.9, 9.1 - 9.4

View the PowerPoint, Videos, or Textbook for Module 3A.

Vocabulary **Fill in the blanks.**

1. (Section 1.9) In 8^4 , 8 is called the _____ and 4 is called the _____.
2. (Section 9.1) The perimeter of a polygon is the _____ around it, or the _____ of the lengths of its sides.
3. (Section 9.2) The _____ of a _____ is the product of the length l and the width w .
4. (Section 9.3) A _____ is a segment that passes through the center of a circle and has endpoints on the circle. A _____ is a segment with one endpoint on the center of the circle and the other endpoint on the circle.
5. (Section 9.3) The _____ of a circle is the distance around it.
6. (Section 9.4) The _____ of a rectangular solid is the number of unit cubes needed to fill it.

Problems **Show ALL steps.**

1. (Section 1.9) Evaluate:
 - a. -5^4
 - b. $(-5)^4$
2. (Section 9.1) A fence is to be built around a vegetable garden that measures 20 ft. by 15 ft. How many feet of fence will be needed? If fencing sells for \$2.95 per foot, what will the fencing cost? Hint: Start by finding the perimeter of the garden.

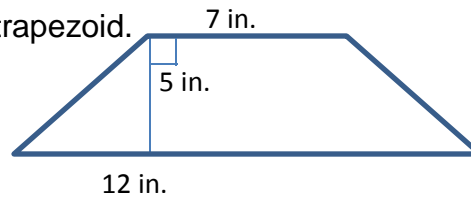
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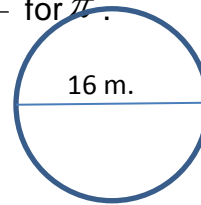
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3. (Section 9.2) Find the area of the trapezoid.



4. (Section 9.3) Find the circumference of this circle. Use $\frac{22}{7}$ for π .



5. (Section 9.3) A local pizza parlor is ordering new square serving plates. If they order plates that are 12 in. on a side how much area of the plate will show when a 10 in. diameter pizza is placed on the plate? In this problem use 3.14 for π .

6. (Section 9.4) Find the volume of a circular cone with a radius of 4 cm. and height 9 cm. Use 3.14 for π . Hint: $V = \frac{1}{3}\pi r^2 h$