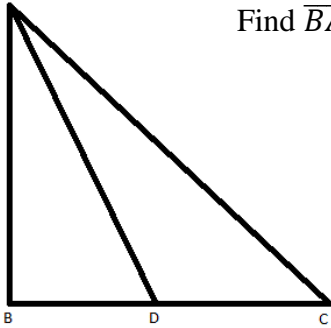


Name: _____
Date: _____
Class: _____

Geometry
Review
2E1

All problems are meant to be solved with 2 equations and 2 variables.

- 1) A In this diagram, $DC = 9$, $m\angle ADC = 112^\circ$, $m\angle BAC = 49^\circ$
Find \overline{BA} to the nearest hundredth. $\overline{BA} \perp \overline{BC}$



- 2) If a rectangle has an area of 72 square feet and a perimeter of 36 feet find the dimensions of the rectangle.

- 3) A cone and cylinder have the same radius and height. The lateral area of the cylinder is $96\pi in^2$ and the volume of the cone is $96\pi in^3$. Find the diameter of both.

- 4) The side of an equilateral triangle is 4 inches shorter than the side of a square. The perimeter of the square is 42 inches more than the perimeter of the triangle. What is the area of the square?

- 5) The perimeter of a rectangle is 46m. If the width were doubled and the length were increased by 5m, the perimeter would become 66. What is the length of the original rectangle?

6) The perimeter of an isosceles triangle is 42cm. If the base was made 7cm longer and the legs were each shortened by 5cm, all 3 sides would be the same length. How long is the base of the original triangle?

7) A rectangle has perimeter 32mm. If the length doubled and then increased by 2, while the width is increased by 5, the new perimeter is 56mm. Find the length of the original rectangle.