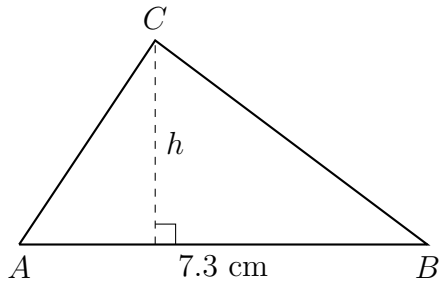


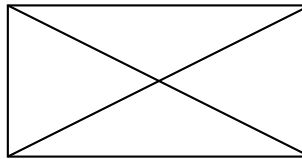
Name:

9.5 Do Now: Areas and volumes

1. Find the area of $\triangle ABC$, $Area = \frac{1}{2}bh$. The altitude h of the triangle is 5 centimeters and the base $AB = 9.25$ cm.



2. The figure shows a rectangle 3 cm wide and 2 cm high.



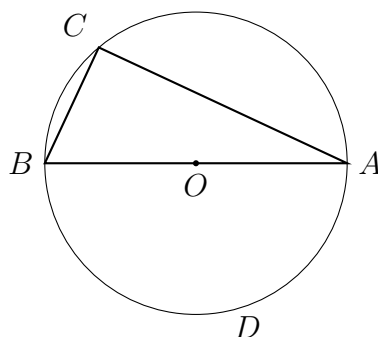
- (a) What is the area of the rectangle?
- (b) What is the perimeter of the rectangle?
- (c) The rectangle is divided by its diagonals into four triangles? Which triangles are larger, or are they all the same size? Justify your response.

3. Circle O has a diameter \overline{AB} , as shown.

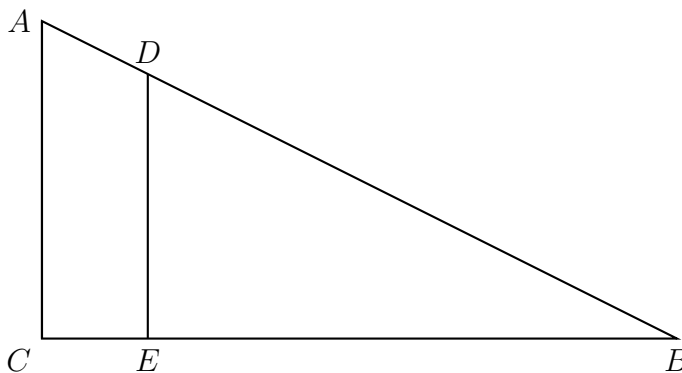
(a) Given that $m\widehat{BC} = 50^\circ$. Find $m\angle A$.

(b) Write down $m\widehat{ADB}$.

(c) Find $m\angle C$.



4. In right triangle ABC shown below, point D is on \overline{AB} and point E is on \overline{BC} such that $\overline{AC} \parallel \overline{DE}$. Given $BD = 12$, $BC = 12$, and $EC = 2$.



(a) Find the length of \overline{BE} .

(b) Find the scale factor, k , dilating $\triangle DBE \rightarrow \triangle ABC$, centered at B .

(c) Find AD .