Chapter 10 Review (Part 1)

Match the correct area formula with each shape.

	$A = \pi r^2$
Rectangle/Parallelogram	$A = \frac{1}{2}bh$
Triangle (regular)	$A = bh$
Triangle (trigonometric)	$A = area\ of\ sector\ - area\ of\ triangle$
Trapezoid	$A = \frac{1}{2}ap$
Rhombus/Kite	$A = \frac{1}{2}d_1 d_2$
Regular polygon	$A = \frac{m\widehat{PR}}{360} \cdot \pi r^2$
Circle	$A = \frac{1}{2}h(b_1 + b_2)$
Sector of a circle	$A = \frac{1}{2}bc(\sin A)$
Segment of a circle	

Find the area of each polygon. Leave your answer in terms of pi when necessary.

1.) a triangle with a base of 3cm and a height of 5 cm

2.) a trapezoid with a height of 8in and bases of 12in and 17in

3.) a kite with diagonal lengths of 6m and 9m

4.) a circle with a diameter of 14mm

5.) a pentagon with an apothem of 7cm and side lengths of 16cm

6.) a parallelogram with a base length of 9in and a height of 10in

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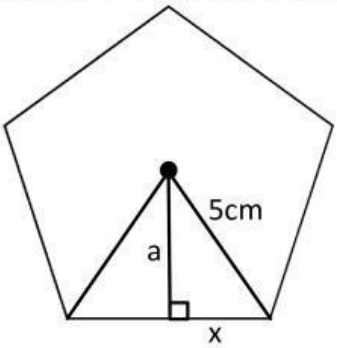
Fill in each missing blank to finish finding the area of the pentagon.
Round to the nearest tenth.



Step 1: Find the angle.

$\frac{360}{\quad} = 72 \qquad \frac{72}{\quad} =$

Step 2: Find the apothem.

$(36) = \frac{\quad}{5}$

$a = 5(\qquad 36)$

Step 3: Find the perimeter.

$(36) = \frac{x}{\quad}$

$x = \qquad (\qquad 36)$

$p = 2x \cdot \qquad = 2[5(\qquad 36)] \cdot$

Step 4: Find the area.

$A = \frac{1}{2} \cdot \qquad \cdot$

$A = \frac{1}{2} \cdot [5(\qquad 36)] \cdot 2[5(\qquad 36)] \cdot$

$A =$

LIVEWORKSHEETS