

NAME _____

DATE _____

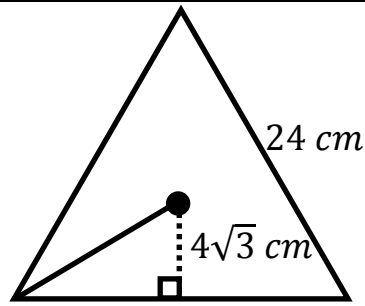
PER. _____

11.3 – AREAS OF REGULAR POLYGONS

Find the indicated measures for each of the regular triangles below.

1. $P =$ _____

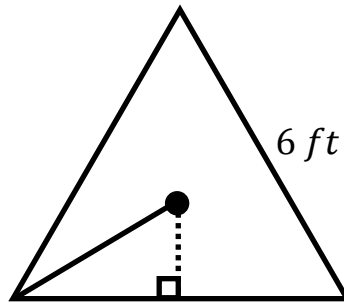
$A =$ _____



2. $P =$ _____

$a =$ _____

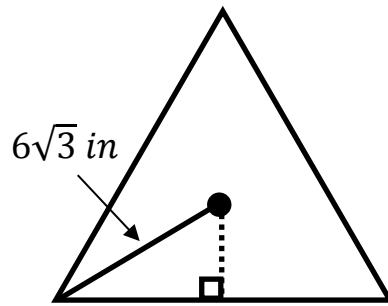
$A =$ _____



3. $P =$ _____

$a =$ _____

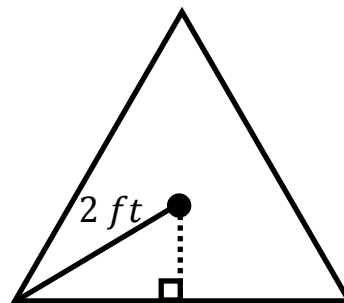
$A =$ _____



4. $P =$ _____

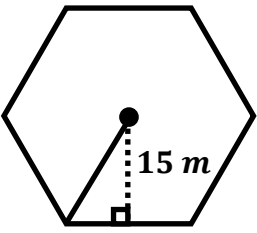
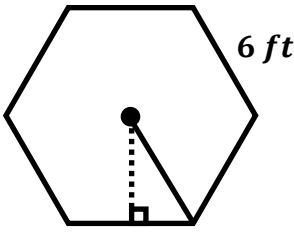
$a =$ _____

$A =$ _____



5. $A =$ _____

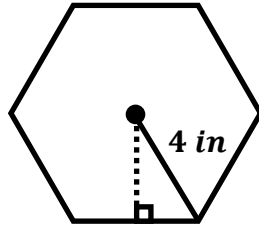
Find the area of a regular triangle with a perimeter of 144 inches.

<p>6. P = _____</p> <p>A = _____</p>	<p>Find the perimeter and area of a regular triangle with an apothem of 9 ft.</p>
<p>7. A = _____</p>	<p>Find the area of a regular triangle with a radius of 8 m.</p>
<p>8. A = _____</p>	<p>Find the area of a regular triangle with a radius of $10\sqrt{2}\text{ m}$.</p>
<p>9. P = _____</p> <p>A = _____</p>	 <p>A regular hexagon is shown with a central point. A solid line segment connects the center to one of the vertices. A dashed vertical line segment, representing the apothem, extends from the center to the midpoint of the bottom horizontal side. A right-angle symbol is shown at the intersection of the apothem and the side. The apothem is labeled 15 m.</p>
<p>10. P = _____</p> <p>$a =$ _____</p> <p>A = _____</p>	 <p>A regular hexagon is shown with a central point. A solid line segment connects the center to one of the vertices. A dashed vertical line segment, representing the apothem, extends from the center to the midpoint of the bottom horizontal side. A right-angle symbol is shown at the intersection of the apothem and the side. The side length of the hexagon is labeled 6 ft.</p>

11. $P =$ _____

$a =$ _____

$A =$ _____



12. $A =$ _____

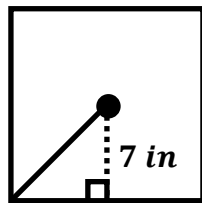
Find the area of a regular hexagon with a perimeter of 60 ft .

13. $A =$ _____

Find the area of a regular hexagon with a side length of 12 m .

14. $P =$ _____

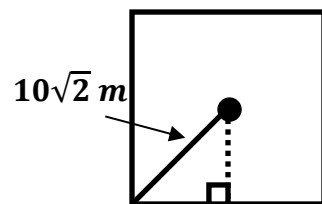
$A =$ _____

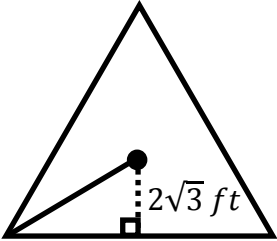
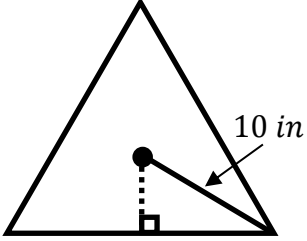
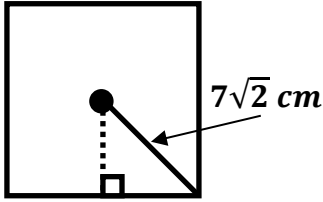


15. $a =$ _____

$P =$ _____

$A =$ _____



<p>16. $r =$ _____</p> <p>$A =$ _____</p>	<p>Find the length of the radius and the area of a square that has a side length of 11 <i>cm</i>.</p>
<p>17. $r =$ _____</p> <p>$A =$ _____</p>	<p>Find the length of the radius and the area of a square that has an apothem length of 12 <i>cm</i>.</p>
<p>18. $P =$ _____</p> <p>$A =$ _____</p>	
<p>19. $a =$ _____</p> <p>$P =$ _____</p> <p>$A =$ _____</p>	
<p>20. $a =$ _____</p> <p>$P =$ _____</p> <p>$A =$ _____</p>	
<p>21. $r =$ _____</p> <p>$P =$ _____</p> <p>$A =$ _____</p>	