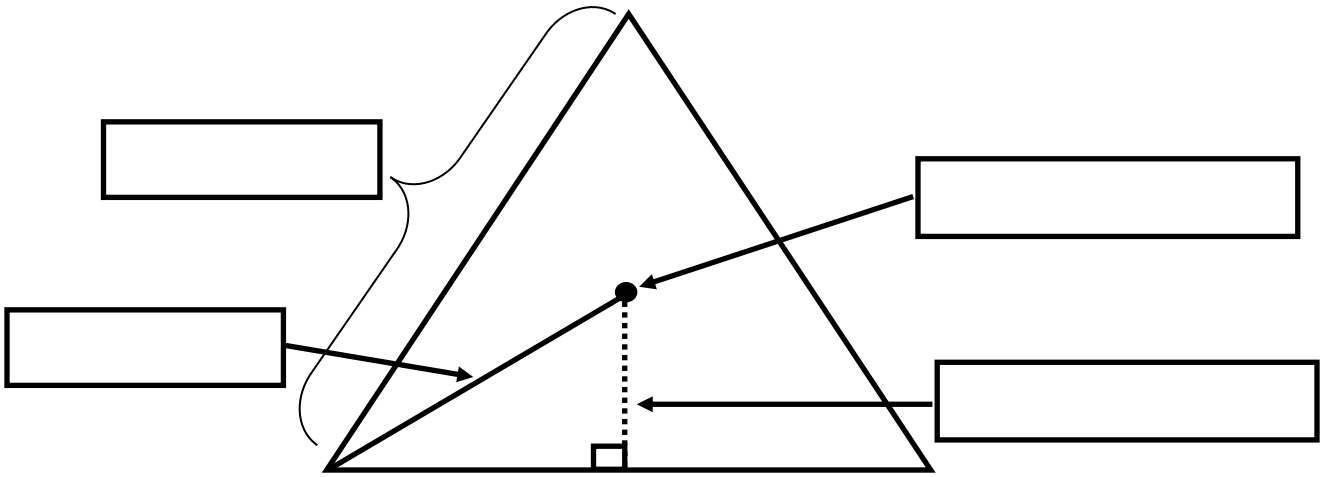
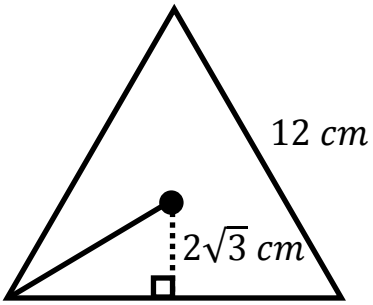
# NOTES 11.3 – AREAS OF REGULAR POLYGONS



$$A_{REGULAR\ POLYGON} = \frac{1}{2}(Perimeter)(apothem)$$

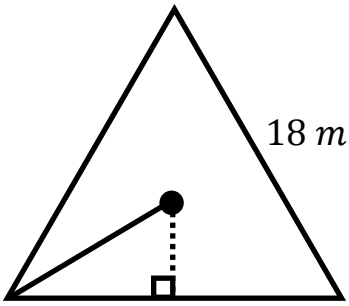
**EXAMPLE 1: Find the indicated measures for the regular triangle.**




**P** = _____

**A** = _____

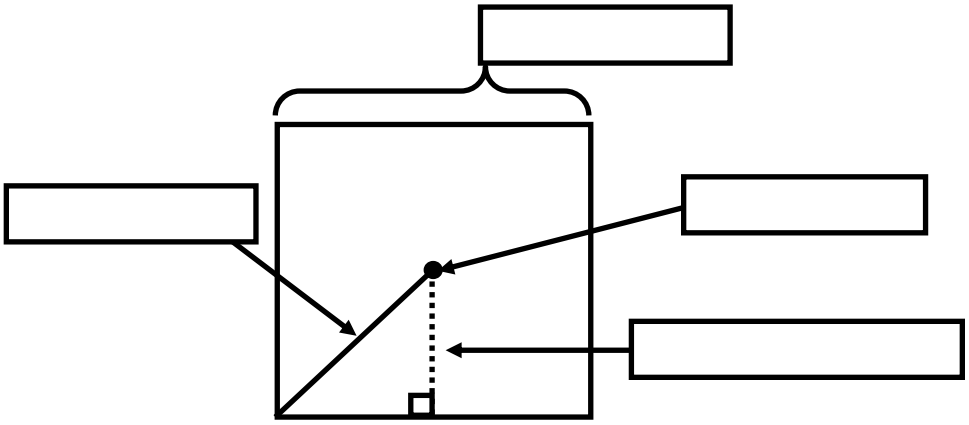
**EXAMPLE 2: Find the indicated measures for the equilateral triangle.**




**P** = _____

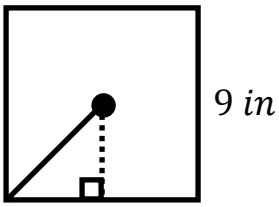
***a*** = _____

**A** = _____



$$A_{REGULAR\ POLYGON} = \frac{1}{2}(Perimeter)(apothem)$$

**EXAMPLE 3: Find the indicated measures for the regular polygon below.**

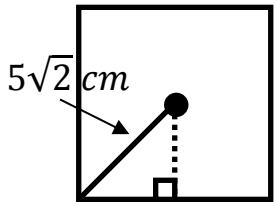



**P** = _____

$r$ = _____

**A** = _____

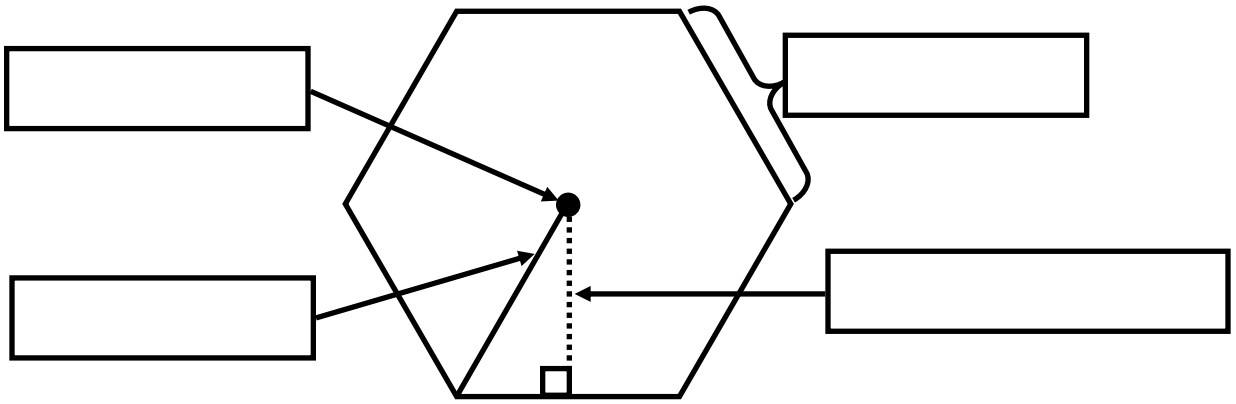
**EXAMPLE 4: Find the indicted measures for the square below.**




$a$ = _____

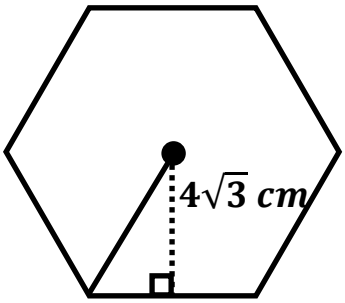
**P** = _____

**A** = _____



$$A_{REGULAR\ POLYGON} = \frac{1}{2}(Perimeter)(apothem)$$

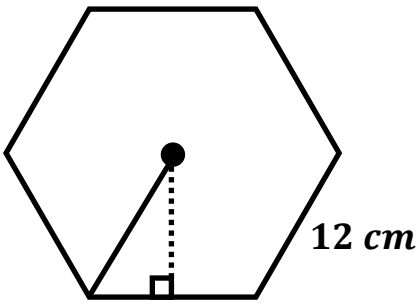
**EXAMPLE 5: Find the indicated measures for the regular polygon below.**




**P** = _____

**A** = _____

**EXAMPLE 6: Find the indicated measures for the regular polygon below.**




**P** = _____

$a$ = _____

**A** = _____