Worksheet #1

REGULAR POLYGON

MeandMath
BELIEVE YOURSELF

Learning goal: Students will be able to understand regular and irregular polygon and to compute the value of missing parameters using formulas.

REGULAR POLYGON	FORMULA
Sum of the interior angles ofa Regular polygon	$(n - 2)180°$
Sum of the exterior angles of a 360° polygon	$360°$
Each interior angle of a regular polygon	$\dfrac{(n - 2)180}{n}$
Each exterior angle of a regular polygon	$\dfrac{360}{n}$

SIDES (N)	INTERIOR ANGLE SUM	ONE INTERIOR ANGLE	EXTERIOR ANGLE SUM	ONE EXTERIOR ANGLE
3	180°			
				90°
	540°			
		120°		
7				
				45°
				40°
10				
			360°	
		156°		
		162°		
				15°

Worksheet #1(Answers)

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REGULAR POLYGON	FORMULA
Sum of the interior angles ofa Regular polygon	$(n - 2)180°$
Sum of the exterior angles of a 360° polygon	$360°$
Each interior angle of a regular polygon	$\dfrac{(n - 2)180}{n}$
Each exterior angle of a regular polygon	$\dfrac{360}{n}$

SIDES (N)	INTERIOR ANGLE SUM	ONE INTERIOR ANGLE	EXTERIOR ANGLE SUM	ONE EXTERIOR ANGLE
3	180°	60°	360°	120°
4	360°	90°	360°	90°
5	540°	108°	360°	72°
6	720°	120°	360°	60°
7	900°	˜128.57°	360°	˜51.43°
8	1080°	135°	360°	45°
9	1260°	140°	360°	40°
10	1440°	144°	360°	36°
12	1800°	150°	360°	30°
15	2340°	156°	360°	24°
20	3240°	162°	360°	18°
24	3960°	165°	360°	15°