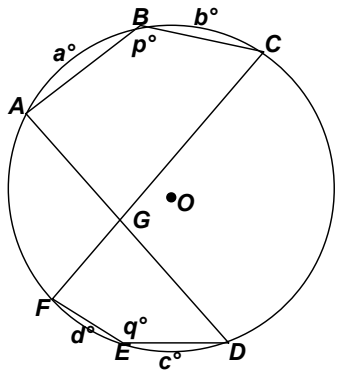

E) As an angle formed by two intersecting chords,

$m\angle AGC = \frac{1}{2}(a + b + c + d)$

As inscribed angles, $p = \frac{1}{2}(360 - (a + b))$ and $q = \frac{1}{2}(360 - (c + d))$

Thus, $p + q = 360 - \frac{1}{2}(a + b + c + d) = 360 - m\angle AGC$

→ $m\angle AGC =$ **$\underline{(360 - p - q)°}$**

F) Factoring the expression $n! + (n + 1)! + (n + 2)!$, we have $n!(1 + (n + 1) + (n + 1)(n + 2))$
$= n!((n + 2) + (n + 1)(n + 2)) = n!(n + 2)(1 + (n + 1)) = n!(n + 2)^2$
Thus, for each triple, we take either the largest prime $\leq n$ or $(n + 2)$, if $(n + 2)$ is prime.

$(t_1, t_2, \ldots, t_7) = (29!(31)^2, 30!(32)^2, 31!(33)^2, 32!(34)^2, 33!(35)^2, 34!(36)^2, 35!(37)^2)$
→ $(p_1, p_2, \ldots, p_7) = (31, 29, 31, 31, 31, 31, 37)$ → **$\underline{221}$**