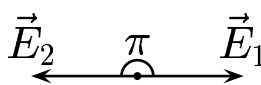
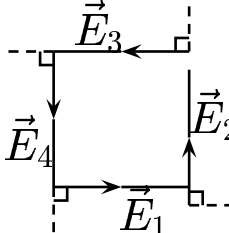


Consider the phasor diagram for the first minimum. For $N > 2$, the first minimum occurs when the contributing vectors form a closed N -sided polygon. Define $\beta (= \phi_{ends})$ to be the angle measured from E_1 to E_N .

# of slits	Phasor diagram	$\beta = \phi_{ends}$
2-slits		π
4-slits		$\frac{3\pi}{2}$
6 slits	?	?

Consider the 6 slits case. Sketch the phasor diagram which corresponds the first minimum. The angle β for this case is given by

- A) $\beta = \frac{\pi}{3}$.
- B) $\beta = \pi$.
- C) $\beta = \frac{5\pi}{3}$.

From sketch, $\beta = 2\pi - \frac{\pi}{3} = \frac{5\pi}{3}$.

Answer **C**.

38.04-02 Phase Difference Between Two End rays 2004-3-24