

UNIT 6 WORKSHEET 2

FINDING COTERMINAL ANGLES

Find one positive and one negative coterminal angle of each of the following. There is no need to graph the angles.

A) 30°

P: $30 + 360 = 390^\circ$

N: $30 - 360 = -330^\circ$

B) -40°

P: $-40 + 360 = 320^\circ$

N: $-40 - 360 = -400^\circ$

C) 150°

P: $150 + 360 = 510^\circ$

N: $150 - 360 = -210^\circ$

D) 220°

P: $220 + 360 = 580^\circ$

N: $220 - 360 = -140^\circ$

E) -330°

P: $-330 + 360 = 30^\circ$

N: $-330 - 360 = -690^\circ$

F) $\frac{\pi}{3}$

P: $\frac{\pi}{3} + 2\pi = \frac{7\pi}{3}$

N: $\frac{\pi}{3} - 2\pi = -\frac{5\pi}{3}$

G) $\frac{5\pi}{2}$

P: $\frac{5\pi}{2} + 2\pi = \frac{9\pi}{2}$

N: $\frac{5\pi}{2} - 2\pi = -\frac{3\pi}{2}$

H) $-\frac{2\pi}{3}$

P: $-\frac{2\pi}{3} + 2\pi = \frac{4\pi}{3}$

N: $-\frac{2\pi}{3} - 2\pi = -\frac{8\pi}{3}$

I) $-\frac{5\pi}{6}$

P: $-\frac{5\pi}{6} + 2\pi = \frac{7\pi}{6}$

N: $-\frac{5\pi}{6} - 2\pi = -\frac{17\pi}{6}$

J) $\frac{5\pi}{3}$

P: $\frac{5\pi}{3} + 2\pi = \frac{11\pi}{3}$

N: $\frac{5\pi}{3} - 2\pi = -\frac{7\pi}{3}$

K) $-\frac{4\pi}{3}$

P: $-\frac{4\pi}{3} + 2\pi = \frac{2\pi}{3}$

N: $-\frac{4\pi}{3} - 2\pi = -\frac{10\pi}{3}$

L) 300°

P: $300 + 360 = 660^\circ$

N: $300 - 360 = -60^\circ$

M) 700°

P: $700 + 360 = 1060^\circ$

N: $700 - 360 = 340^\circ$

N) $-\frac{17\pi}{6}$

P: $-\frac{17\pi}{6} + 2\pi = -\frac{5\pi}{6}$

N: $-\frac{17\pi}{6} - 2\pi = -\frac{29\pi}{6}$

O) $\frac{7\pi}{3}$

P: $\frac{7\pi}{3} + 2\pi = \frac{13\pi}{3}$

N: $\frac{7\pi}{3} - 2\pi = -\frac{5\pi}{3}$

P) -410°

P: $-410 + 360 = -50^\circ$

N: $-410 - 360 = -770^\circ$

Q) 1000°

P: $1000 + 360 = 1360^\circ$

N: $1000 - 360 = 640^\circ$

R) $\frac{31\pi}{6}$

P: $\frac{31\pi}{6} + 2\pi = \frac{39\pi}{6}$

N: $\frac{31\pi}{6} - 2\pi = \frac{23\pi}{6}$

S) $-\frac{15\pi}{4}$

P: $-\frac{15\pi}{4} + 2\pi = -\frac{7\pi}{4}$

N: $-\frac{15\pi}{4} - 2\pi = -\frac{23\pi}{4}$

T) $\frac{5\pi}{6}$

P: $\frac{5\pi}{6} + 2\pi = \frac{17\pi}{6}$

N: $\frac{5\pi}{6} - 2\pi = -\frac{7\pi}{6}$