

King Fahd University of Petroleum and Minerals

Prep-Year Math Program

Math 002 - Term 151

Recitation (5.3)

Question 1:

(a): Find the exact value of $\cos 44^\circ + \cos 136^\circ$

(b): Find the exact value of $\cot(675^\circ) - \cos(240^\circ)$

Answer: (a): 0 (b): $-\frac{1}{2}$

Question 2: Find the measure of the reference angle θ' for the given angle θ

(i): -570°

(ii): $220^\circ 25' 45''$

Answer: (i): 30° (ii): $40^\circ 25' 45''$

Question 3: If $\tan 40^\circ = 0.84$, then $3 \tan 140^\circ + 5 \cot 410^\circ =$

- (A) 1.68
- (B) 6.72
- (C) 1.84
- (D) -6.72
- (E) -1.68

Answer: (A): 1.68

Question 4: The exact value of $\sin(-1860^\circ)$ is:

Answer: $-\frac{\sqrt{3}}{2}$

Question 5: $4 \sin(-870^\circ) + \tan 143^\circ + \cot 53^\circ =$

Answer: -2