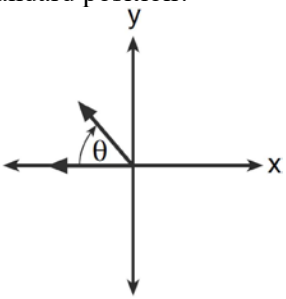
Name: _____

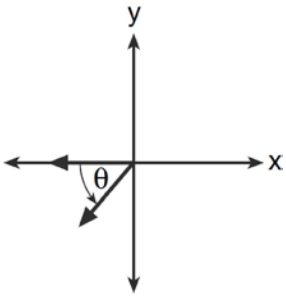
F.TF.A.1: Unit Circle

1 If $m\angle\theta = -50$, which diagram represents θ drawn in standard position?

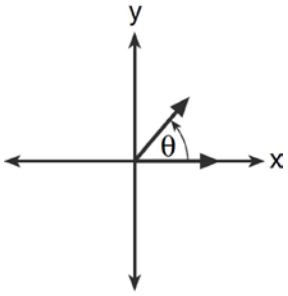
1)



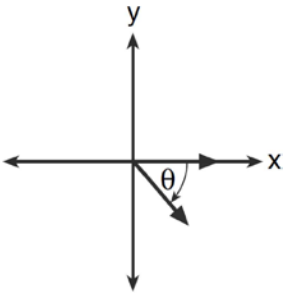
2)



3)

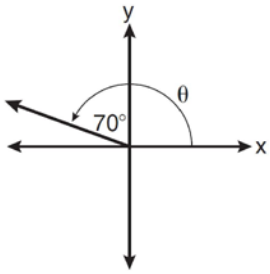


4)

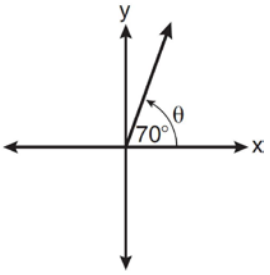


2 In which graph is θ coterminal with an angle of $-70°$?

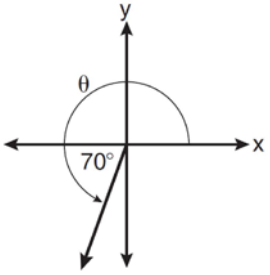
1)



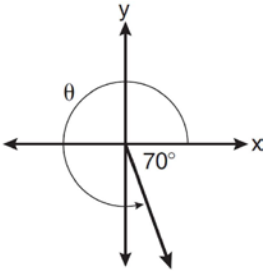
2)



3)

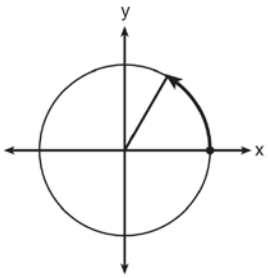


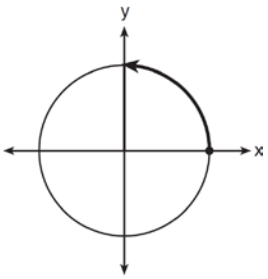
4)

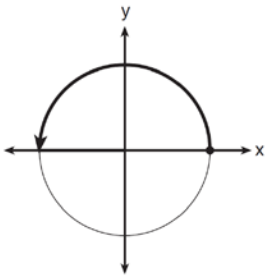


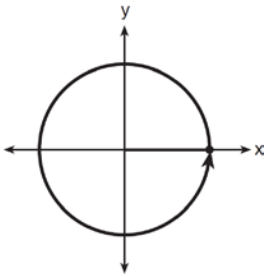
Name: _____

3 Which diagram shows an angle rotation of 1 radian on the unit circle?

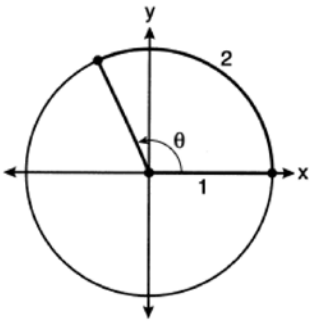
1) 

2) 

3) 

4) 

4 An angle, θ, is rotated counterclockwise on the unit circle, with its terminal side in the second quadrant, as shown in the diagram below.



Which value represents the radian measure of angle θ?

1) 1
2) 2
3) 65.4
4) 114.6

5 Which angle is coterminal with an angle of 125°?

1) –125°
2) –235°
3) 235°
4) 425°

6 Which angle has the same terminal side as an angle of 155°?

1) –205°
2) –155°
3) 25°
4) 335°

7 Which angle does *not* terminate in Quadrant IV when drawn on a unit circle in standard position?
1) –300°
2) –50°
3) 280°
4) 1030°

8 The terminal side of an angle measuring $\frac{4\pi}{5}$ radians lies in Quadrant
1) I
2) II
3) III
4) IV

9 An angle that measures $\frac{5\pi}{6}$ radians is drawn in standard position. In which quadrant does the terminal side of the angle lie?

10 An angle that measures $\frac{5\pi}{3}$ radians is drawn in standard position. In which quadrant does the terminal side of the angle lie?

11 An angle with measure $\frac{7\pi}{4}$ radians is in standard position. In which quadrant does its terminal side lie?

F.TF.A.1: Unit Circle
Answer Section

1 ANS: 4 REF: 061206a2
2 ANS: 4 REF: 081005a2
3 ANS: 1 REF: 081616aii
4 ANS: 2 REF: 062219aii
5 ANS: 2
Coterminal angles differ by multiples of 360°. $125 - 360 = -235$.

REF: 080417b
6 ANS: 1
$-205° + 360° = 155°$

REF: 061614a2
7 ANS: 1
$-300° + 360° = 60°$, which terminates in Quadrant I.

REF: 011602a2
8 ANS: 2 REF: 061502a2
9 ANS:
II

REF: 069602siii
10 ANS:
IV

REF: 080005siii
11 ANS:
IV

REF: 089305siii