

Convert each degree measure into radians and each radian measure into degrees:

1. $125^\circ \times \frac{\pi}{180^\circ}$

$\frac{125^\circ \pi}{180^\circ} = \frac{25\pi}{36}$

2. $-\frac{3\pi}{4} \times \frac{180^\circ}{\pi}$

$-\frac{540^\circ}{4} = -135^\circ$

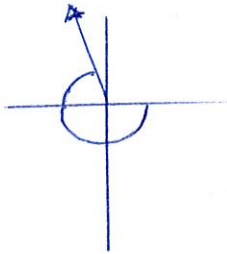
3. $\frac{13\pi}{12} \times \frac{180^\circ}{\pi}$

$\frac{2340^\circ}{12} = 195^\circ$

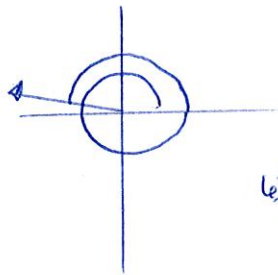
If given a unitless measure, it's a radian measure. Change to degrees.
 $5. 1.4 \times \frac{180^\circ}{\pi} \approx 80.2^\circ$

Sketch each angle in standard position:

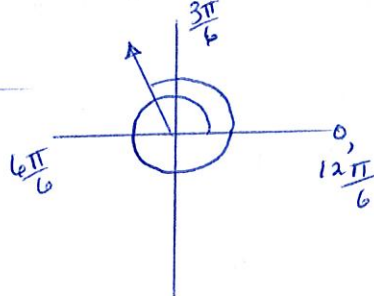
5. -260°



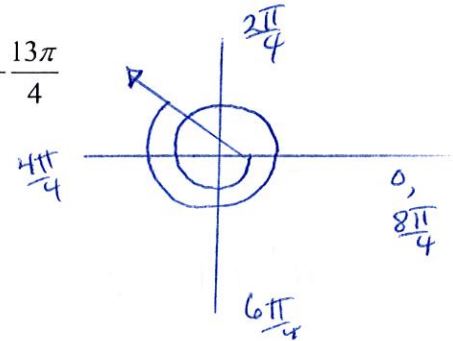
6. 530°



7. $\frac{17\pi}{6}$



8. $-\frac{13\pi}{4}$

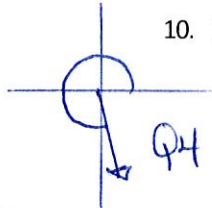


In what quadrant does the angle terminate?

9. -808°

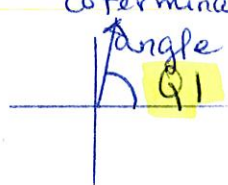
$+360^\circ$
 $+360^\circ$
 $+360^\circ$

272° is the principle angle; it lies in Q4



10. 1885°

85° is the principle coterminal angle

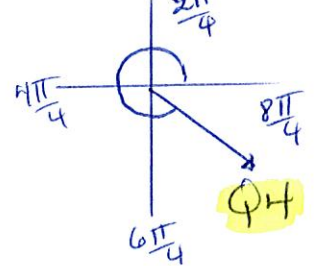


11. $\frac{17\pi}{3} + \frac{6\pi}{3} + \frac{6\pi}{3} + \frac{6\pi}{3}$

$\rightarrow \frac{\pi}{3}$



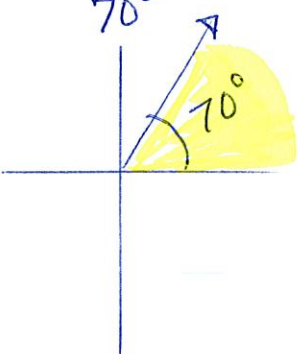
12. $\frac{23\pi}{4} - \frac{8\pi}{4} - \frac{8\pi}{4} = \frac{7\pi}{4}$



13. -650°

$+360^\circ$
 $+360^\circ$

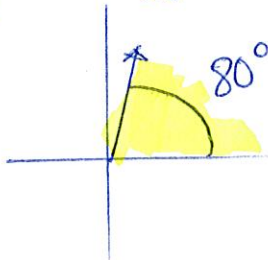
70°



14. 1880°

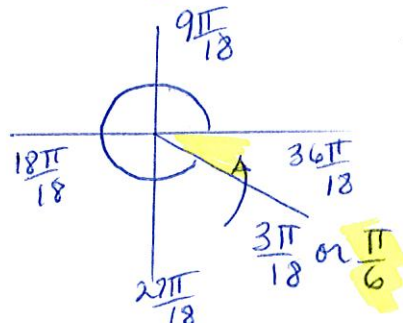
-360°
 -360°
 -360°
 -360°
 -360°

80°



15. $-\frac{39\pi}{18} + \frac{36\pi}{18} + \frac{36\pi}{18}$

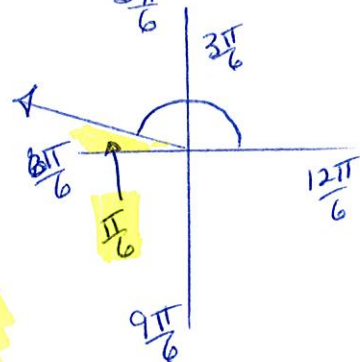
$\frac{33\pi}{18}$



16. $\frac{65\pi}{6} - \frac{12\pi}{6} - \frac{12\pi}{6} - \frac{12\pi}{6} - \frac{12\pi}{6}$

$-12\pi/6$

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



There are an infinite number of correct answers.

You must give answer(s) in same unit you started with.

Find a positive and a negative coterminal angle for the given angle.

17. -865°

$$-505^\circ$$

$$215^\circ$$

18. 992°

$$272^\circ$$

$$-88^\circ$$

19. $\frac{55\pi}{4}$

$$-\frac{\pi}{4}$$

$$\frac{7\pi}{4}$$

20. $-\frac{69\pi}{45}$

$$\frac{21\pi}{45} \text{ or } \frac{7\pi}{9}$$

$$-\frac{114\pi}{45} \text{ or } -\frac{38\pi}{15}$$

Find the complement and supplement of each angle (if possible)

21. 64°

$$C: 90^\circ - 64^\circ = 26^\circ$$

$$S: 180^\circ - 64^\circ = 116^\circ$$

22. 158°

$$C: \text{NA}$$

$$S: 22^\circ$$

23. $\frac{7\pi}{12}$

$$C: \text{NA}$$

$$S: \frac{5\pi}{12}$$

24. $\frac{11\pi}{18}$

$$C: \text{NA}$$

$$S: \frac{7\pi}{18}$$