

Math 06, Homework 11 on the circle, graphing
due Tue, April 30 at the start of class.

These first eight questions from the Trigonometry Supplement are 2 points each. Write your work on a separate sheet. Show clearly all your working out and reasoning and check your answers match the ones in the book at the end of each section.

1. **Q13, p. 157.** Give the exact coordinates of the point $P(x, y)$ on the unit circle corresponding to -225° .
2. **Q21, p. 157.** Give the exact coordinates of the point $P(x, y)$ on the unit circle corresponding to $2\pi/3$.
3. **Q35, p. 157.** For the point $P(-\sqrt{3}/2, -1/2)$ on the unit circle, give the sine, cosine and the tangent of the angle θ that corresponds to P .
4. **Q45, p. 157.** Determine $\sin \theta$, $\cos \theta$ and $\tan \theta$ for $\theta = \pi/2$.
5. **Q51, p. 157.** Find $\tan \frac{11\pi}{12}$, rounded to the nearest ten-thousandth.
6. **Q65, p. 158.** Find all values of θ , where $0 \leq \theta \leq 2\pi$, that make $\sin \theta = -1/2$.
7. **Q69, p. 158.** Find all values of θ , where $0 \leq \theta \leq 2\pi$, that make $\sin \theta = 0$.
8. **Q1, p. 175.** Complete this table of values for $y = 4 \sin x$

x	$y = 4 \sin x$
0	
$\pi/2$	
π	
$3\pi/2$	
2π	

These next five questions are 2 points each. It is very important that you show clearly any work you had to do to get the answer and explain your reasoning.

9. Give the exact coordinates of the point $P(x, y)$ on the unit circle corresponding to 150° .
10. Give the exact coordinates of the point $P(x, y)$ on the unit circle corresponding to $3\pi/2$.
11. For the point $P(0, -1)$ on the unit circle, give the sine, cosine and the tangent of the angle θ that corresponds to P .

12. Find all values of θ , where $0 \leq \theta \leq 2\pi$, that make $\cos \theta = 0$.

13. Complete this table of values for $y = -\cos x$

x	$y = -\cos x$
0	
$\pi/2$	
π	
$3\pi/2$	
2π	