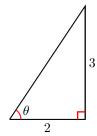
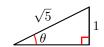
Precalculus Homework Lecture 2

1. Find the 6 trigonometric functions of the indicated angle in the indicated right triangle.



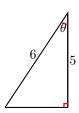
(a)



(b)



(c) (d)



2. Find the exact value of the trigonometric function (using radicals).

- (a) $\cos 135^{\circ}$.
- (b) sin 225°.
- (c) $\cos 495^{\circ}$.
- (d) $\sin 560^{\circ}$.
- (e) $\sin\left(\frac{3\pi}{2}\right)$

- (f) $\cos\left(\frac{11\pi}{6}\right)$.
- (g) $\sin\left(\frac{2015\pi}{3}\right)$.
- (h) $\cos\left(\frac{17\pi}{3}\right)$.
- 3. Find all solutions of the equation in the interval $[0, 2\pi)$. The answer key has not been proofread, use with caution.
 - (a) $\sin x = -\frac{\sqrt{2}}{2}$.
 - (b) $\cos x = \frac{\sqrt{3}}{2}$.
 - (c) $\sin(3x) = \frac{1}{2}$.
 - (d) $\cos(7x) = 0$.
 - (e) $\cos(3x + \frac{\pi}{2}) = 0$.
 - (f) $\sin\left(5x \frac{\pi}{3}\right) = 0$.