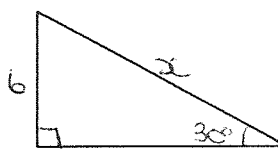
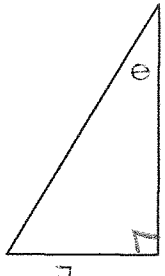


3U Quiz

Name: _____

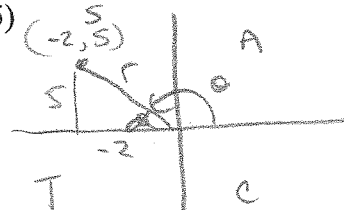
1. Solve for the unknown

a)  $\sin 30^\circ = \frac{6}{x}$
 $x = \frac{6}{\sin 30}$
 $x = 12$ ✓

b)  $\tan \theta = \frac{7}{15}$ ✓
 $\theta = \tan^{-1}(\frac{7}{15})$
 $\theta \approx 25^\circ$ ✓

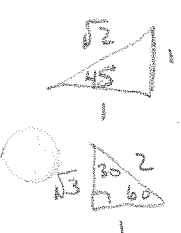
2. Find the primary and reciprocal trigonometric ratios for angle θ . Given the terminal lies on the point $(-2, 5)$

[3] $r^2 = (-2)^2 + (5)^2$
 $= 4 + 25$
 $= 29$
 $r = \sqrt{29}$ ✓



$\sin \theta = \frac{5}{\sqrt{29}} = \frac{5\sqrt{29}}{29}$ ✓ $\csc \theta = \frac{\sqrt{29}}{5}$
 $\cos \theta = \frac{-2}{\sqrt{29}} = \frac{-2\sqrt{29}}{29}$ $\sec \theta = \frac{-\sqrt{29}}{2}$
 $\tan \theta = \frac{-5}{2}$ $\cot \theta = \frac{-2}{5}$

3. Evaluate. Give the EXACT answer (use special triangles).

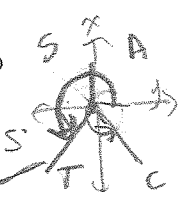


a) $\sin 330^\circ = -\frac{1}{2}$ ✓
 b) $\tan 225^\circ = 1$ ✓
 c) $\sec 150^\circ = -\frac{2}{\sqrt{3}}$ ✓
 d) $\csc 60^\circ = \frac{2}{\sqrt{3}}$ ✓

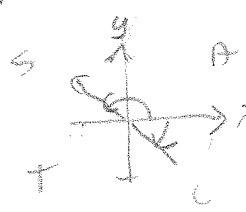
S	A
T	C

4. Determine the value(s) of θ for each of the following:

a) $\sin \theta = \frac{-\sqrt{2}}{2}, 0 \leq \theta \leq 360^\circ$
 $\sin \theta = -\frac{1}{\sqrt{2}}$
 $\theta = 225^\circ$ or 315° ✓ ✓



b) $\tan \theta = -\sqrt{3}, -180^\circ \leq \theta \leq 180^\circ$
 $\theta = 120^\circ$ or -60° ✓ ✓



c) $\sec \theta = 3.8637$

$\cos \theta = \frac{1}{3.8637}$ ✓
 $\theta \approx 75^\circ$ ✓