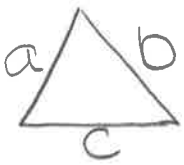
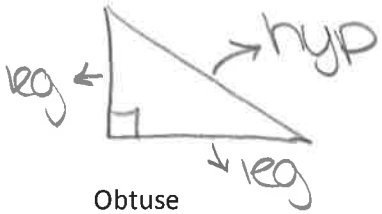
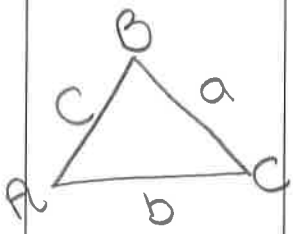
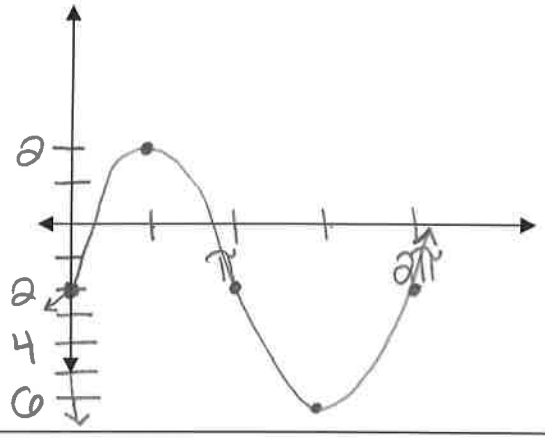
Final Exam Review Day 5: Unit 5 Trigonometry

Topic	Essential Concepts/Formulas
Triangle Review	Triangle Inequality Theorem:  $a+b>c$ $b+c>a$ $c+a>b$
	Pythagorean Theorem: In a right $\triangle$, $a^2+b^2=c^2$ 
	Converse of the Pythagorean Theorem: Right $c^2=a^2+b^2$ Acute $c^2<a^2+b^2$ Obtuse $c^2>a^2+b^2$
Trig Functions	Sine: $\sin\theta=\frac{opp}{hyp}$ Cosine: $\cos\theta=\frac{adj}{hyp}$ Tangent: $\tan\theta=\frac{opp}{adj}$
	Angle of Elevation/Depression: 
Circles	Standard Equation for a Circle: $(x-h)^2+(y-k)^2=r^2$ (h,k)=center r=radius
	Converting: Radians to Degrees: mult by $180/\pi$ Degrees to Radians: mult by $\pi/180$
Laws	
	Law of Sines $\frac{\sin A}{a}=\frac{\sin B}{b}=\frac{\sin C}{c}$
	Law of Cosines $a^2=b^2+c^2-2bc\cdot\cos A$ $b^2=a^2+c^2-2ac\cdot\cos B$ $c^2=a^2+b^2-2ab\cdot\cos C$
	Area of an Oblique Triangle $\frac{1}{2}bc\sin A=\frac{1}{2}ab\sin C=\frac{1}{2}ac\sin B$

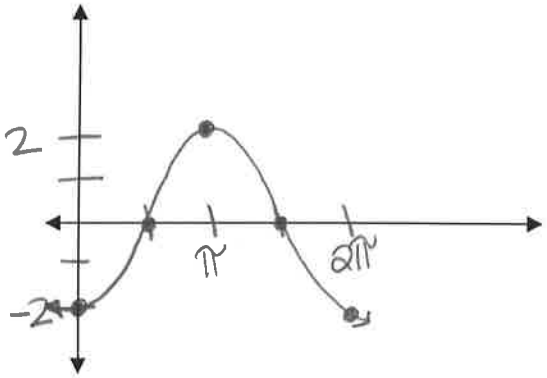
Graph y = 4 sine (x) − 2

0	-2
1	2
0	-2
-1	-6
0	-2



Graph y = -2 cos (x)

1	-2
0	0
-1	2
0	0
1	-2



Graph y = tan (x) - 2

0	-2
1	-1
undef.	undef.
-1	-3
0	-2
1	-1
undef.	undef.
-1	-3
0	-2