CALCULUS SUMMER FLASH CARDS

Based on those prepared by Gertrude R. Battaly (http://www.battaly.com/), with her gracious permission.

Instructions for Using the Flash Cards:

1. Cut along the horizontal lines only.

2. Fold along the vertical lines. This will result in flash "cards" with the term on one side and the definition or equivalent expression on the other. You may choose to tape or glue this paper card to a 3×5 card.

3. Use the flash cards a few times a week. If you know the content of a card, put it away for this session. If you don't know it, put it at the back of the stack and do it again.

4. Work alone or with a partner.

5. There will be a quiz on this information during the first week of school. Be ready to ace it!

$\sin 0$	0
$\sin \dfrac{\pi}{6}$	$\dfrac{1}{2}$
$\sin \dfrac{\pi}{4}$	$\dfrac{1}{\sqrt{2}} = \dfrac{\sqrt{2}}{2}$
$\sin \dfrac{\pi}{3}$	$\dfrac{\sqrt{3}}{2}$
$\sin \dfrac{\pi}{2}$	1

$\sin \pi$	0
$\sin \dfrac{3\pi}{2}$	-1
$\sin 2\pi$	0
$\cos 0$	1
$\cos \dfrac{\pi}{6}$	$\dfrac{\sqrt{3}}{2}$

$\cos \dfrac{\pi}{4}$	$\dfrac{1}{\sqrt{2}} = \dfrac{\sqrt{2}}{2}$
$\cos \dfrac{\pi}{3}$	$\dfrac{1}{2}$
$\cos \dfrac{\pi}{2}$	0
$\cos \pi$	-1
$\cos \dfrac{3\pi}{2}$	0

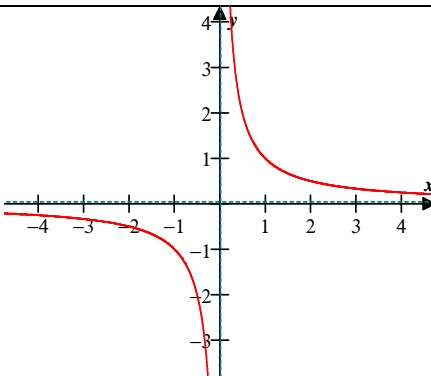|	
$\cos 2\pi$	1
$\tan \theta$ (in terms of sine and/or cosine)	$\dfrac{\sin \theta}{\cos \theta}$
$\cot \theta$ (in terms of sine and/or cosine)	$\dfrac{\cos \theta}{\sin \theta}$
$\csc \theta$ (in terms of sine and/or cosine)	$\dfrac{1}{\sin \theta}$
$\sec \theta$ (in terms of sine and/or cosine)	$\dfrac{1}{\cos \theta}$
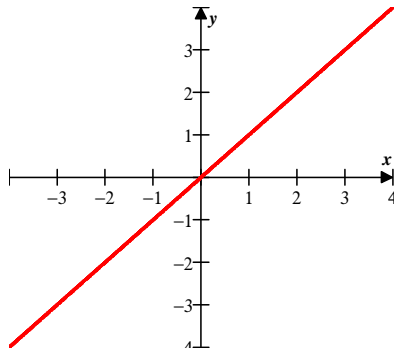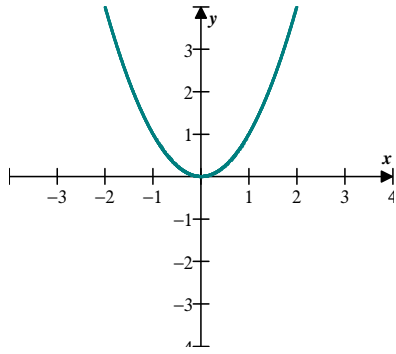
	Graph of $y = x$
	Graph of $y = x^2$
	Graph of $y = x^3$
	Graph of $y = \sqrt{x}$
	Graph of $y = \dfrac{1}{x}$
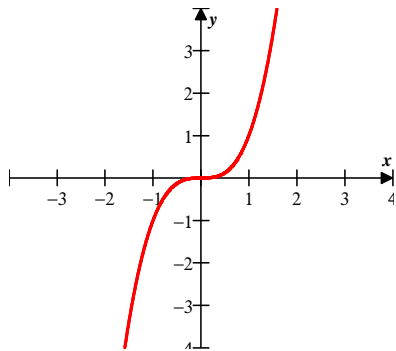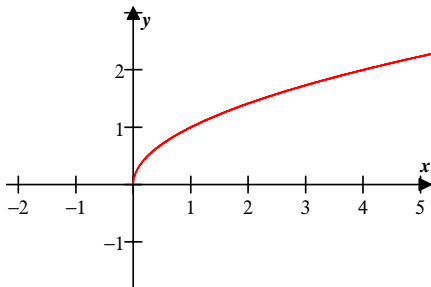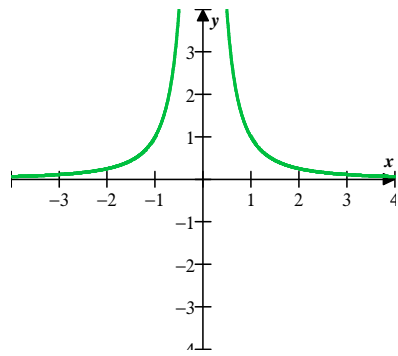
	Graph of $y = \dfrac{1}{x^2}$
	Graph of $y = \sin x$
	Graph of $y = \cos x$
	Graph of $y = \tan x$
	Graph of $y = \sec x$
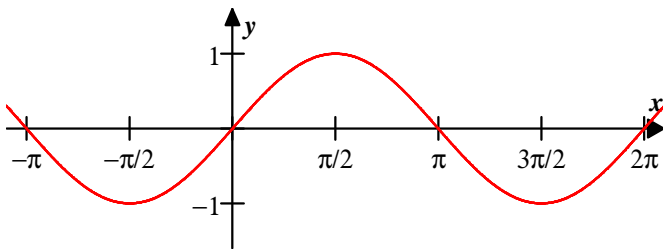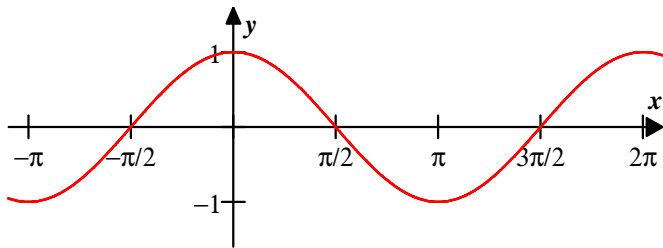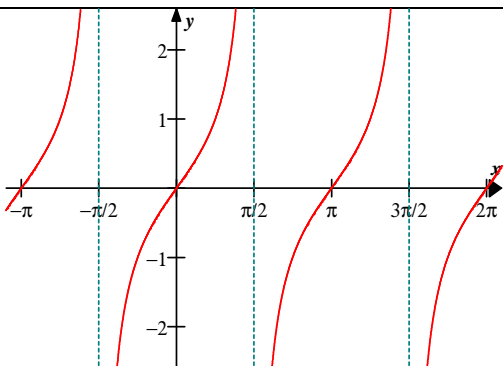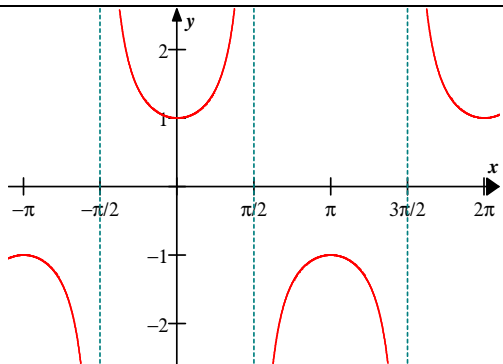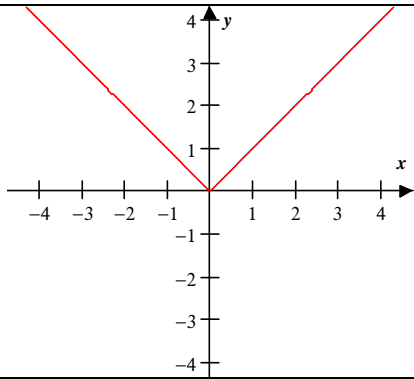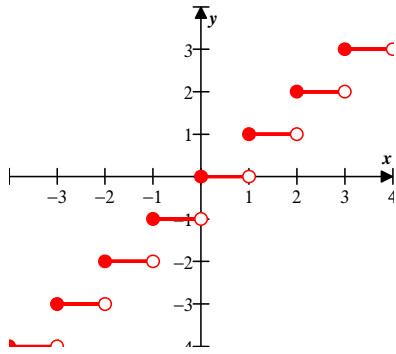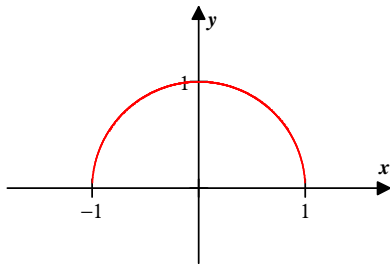
	Graph of $y = \lvert x \rvert$
	Graph of $y = [x]$
	Graph of $y = \sqrt{1 - x^2}$
	Graph of $y = e^x$
	Graph of $y = \ln x$
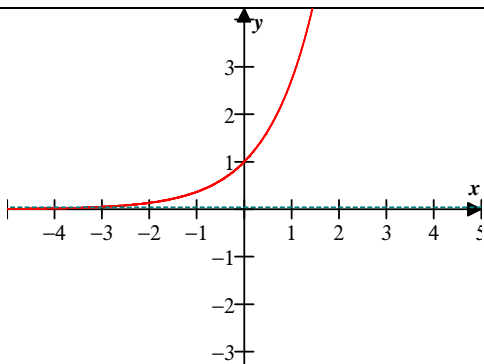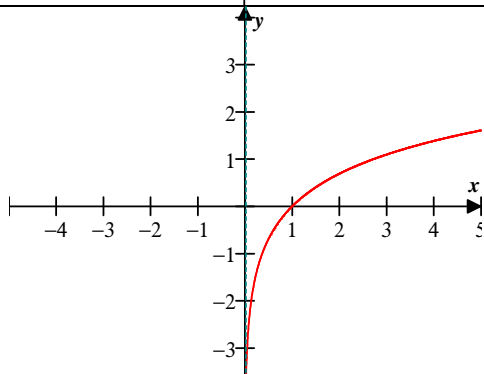
Definition: An even function is…	…symmetric with respect to the y-axis, like $y = x^2$, $y = \cos x$, or $y = \lvert x \rvert$. $$f(-x) = f(x)$$
Definition: An odd function is…	…symmetric with respect to the origin, like $y = x^3$, $y = \sin x$, or $y = \tan x$. $$f(-x) = -f(x)$$
Point-slope form of a linear equation	$$y - y_1 = m(x - x_1)$$
Sine is positive in quadrants…	I and II, where $y > 0$
Cosine is positive in quadrants…	I and IV, where $x > 0$