

FQ1 10-05-07

$$\cos^2 t = (\cos t)^2$$

ON A BLACKBOARD @ YSU:

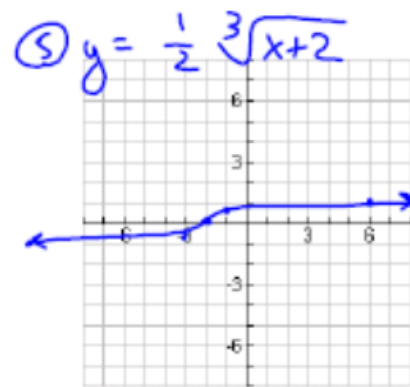
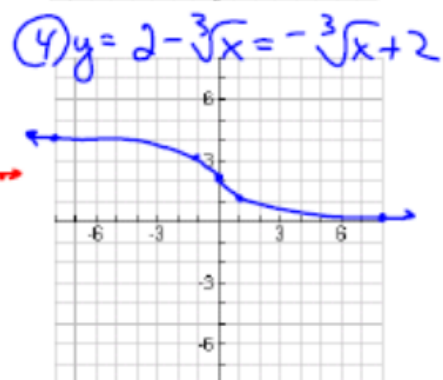
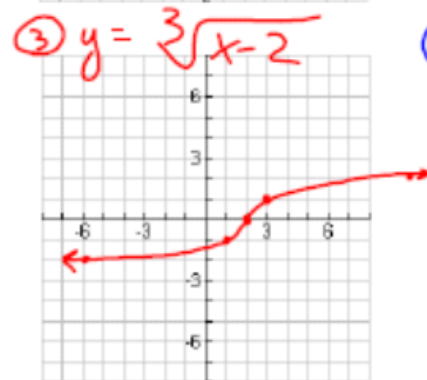
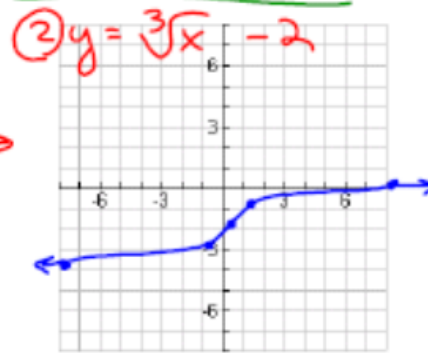
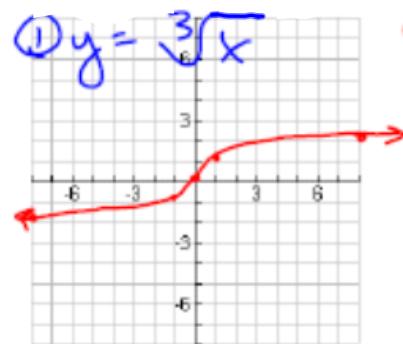
$$d = \sqrt{\frac{\cos^2 t - 2\cos t \sin t + \sin^2 t}{3} + \frac{\cos^2 t + 2\cos t \sin t + \sin^2 t}{3}}$$

$$d = \sqrt{\frac{1 - 2\cos t \sin t}{3} + \frac{1 + 2\cos t \sin t}{3}}$$

$$d = \sqrt{\frac{1 - 2\cos t \sin t + 1 + 2\cos t \sin t}{3}}$$

$$d = \sqrt{\frac{2}{3}} = \frac{\sqrt{6}}{3}$$

BG COLUMN 9



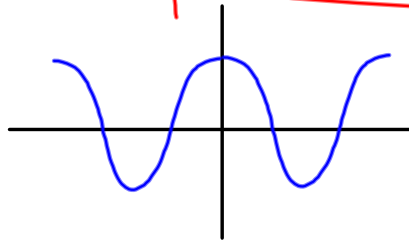
## EVEN FUNCTION

DEFN:  $f(-x) = f(x); \forall x \in \mathbb{R}$

GRAPHS: ARE SYMMETRICAL ABOUT THE y-AXIS.

EVEN  $y = x^2$   
 $y = |x|$

COS IS EVEN:  $\cos(-x) = \cos x; \forall x \in \mathbb{R}$



$$\cos\left(-\frac{2\pi}{3}\right) = \cos\frac{2\pi}{3} = -\frac{1}{2}$$

$$\cos\left(-\frac{2\pi}{7}\right) = \cos\left(\frac{2\pi}{7}\right)$$

$\cos\left(-\frac{2\pi}{7}\right)$	.623489801859
$\cos\left(\frac{2\pi}{7}\right)$	.623489801859
$\cos(-x)$	<u>EVEN</u> $\cos(x)$

## ODD FUNCTIONS

$$f(-x) = -f(x); \forall x \in \mathbb{R}$$

GRAPHS ARE SYMMETRICAL ABOUT THE ORIGIN

$$y=x$$

$$y=x^3$$

$$y=\sqrt[3]{x}$$

SIN IS ODD:  $\sin(-x) = -\sin x; \forall x \in \mathbb{R}$

$$\sin\left(-\frac{5\pi}{3}\right) = -\sin\frac{5\pi}{3}$$

$$= -\left(-\frac{\sqrt{3}}{2}\right)$$

$$= +\frac{\sqrt{3}}{2}$$

$\sin\left(\frac{-5\pi}{3}\right)$	$\frac{\sqrt{3}}{2}$
$-\sin\left(\frac{5\pi}{3}\right)$	$\frac{\sqrt{3}}{2}$
$\sin(-x)$	$-\sin(x)$

ODD

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O.T.L.

- FINISH "DISCOVERY" GIFT
- DO THE "OTHER" SIDE OF THE LONG YELLOW GIFT "FAMILIES..."
- BG COLUMN 10 (P.10A)
- KNOW VALUES & BASICS