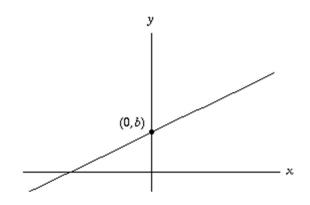
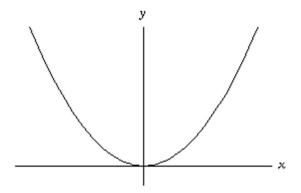
## MA 16020 LESSON 9: AREA BETWEEN TWO CURVES (ALGEBRA REVIEW)

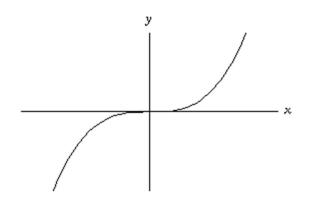
## **Common Graphs:**



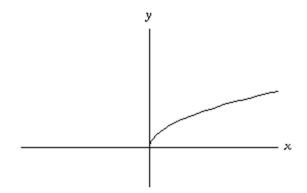
$$y = mx + b$$



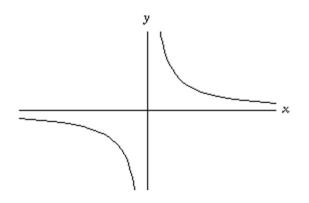
$$y = x^2$$



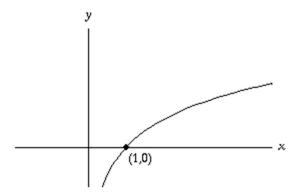
$$y = x^3$$



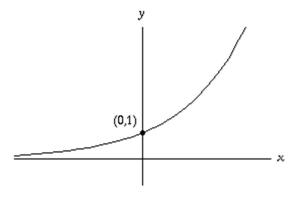
$$y = \sqrt{x}$$



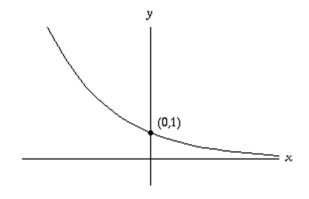
$$y=\frac{1}{x}$$



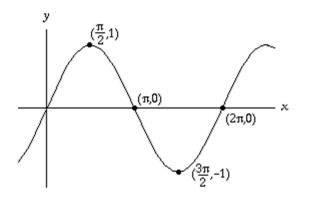
$$y = ln(x)$$



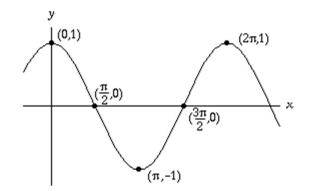
$$y = e^x$$



$$y = e^{-x}$$



$$y = sin(x)$$



$$y = cos(x)$$

## (OPTIONAL HOMEWORK): Graph the following functions

1. 
$$y = -\frac{2}{5}x + 3$$

2. 
$$y = 2x^2 + 1$$

3. 
$$y = -x^2 + 7$$

4. 
$$y = \sqrt{x+3}$$

5. 
$$y = \frac{x}{12}$$

6. 
$$y = e^{2t}$$

7. 
$$y = e^{5t}$$

8. 
$$y = cos(x) + 3$$

9. 
$$y = -\sin(x)$$

10. 
$$y = x^2 + 2x + 1$$

<sup>\*</sup> Note for 10. Rewrite y using the Perfect Square Formula.