

Additional Exercises (Algebra Review):

Note: If you find any mistakes, please let me know.

1. Plot these data points

x	$f(x)$	$g(x)$
0	8	3
1	7	5
2	6	7
3	5	9
4	4	11
5	3	13
6	2	15

2. Determine equation

Answer:

$$f(x)=8-x$$

$$g(x)=2x+3$$

3. Find intersection to equations in 2.

$$x=5/3$$

$$y=8-5/3 = 6+1/3$$

4. Area above $x=1$, below $g(x)$

$$5*10*0.5=25$$

5. Find intersection of:

$$f(x)=3x-5$$

$$g(x)=5-2x$$

Answer:

$$x=2, y=1$$

6. At what point is $g(x)$ exactly 2 units below $f(x)$ ($f(x)$, $g(x)$ in 5)

$$f(x)-2=g(x)$$

$$3x-5-2=5-2x$$

$$5x=12$$

$$x=12/5$$

6. Find intersection of:

$$f(x)=x-3$$

$$g(x)=7-x$$

$$2x=10$$

$$x=5$$

$$y=2$$

8. At what point is $g(x)$ exactly 4 above below $f(x)$

$$f(x)+4=g(x)$$

$$x-3+4=7-x$$

$$x+1=7-x$$

$$2x=8$$

$$x=4$$