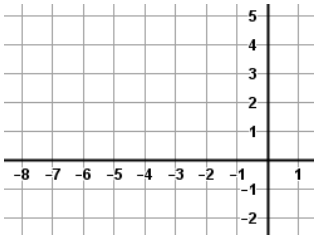
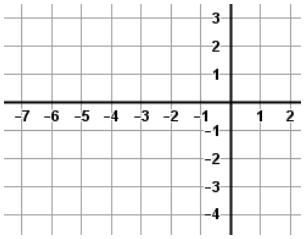
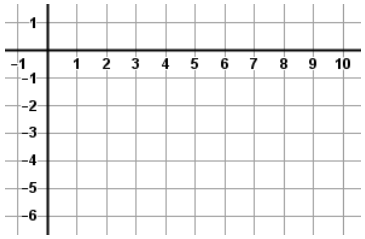
$f(x) = 2\|x + 4\|$

Domain:
Range:
Continuity:
Zero(s):
Extrema:
Intervals of Inc/Dec/Constant:
End behavior:

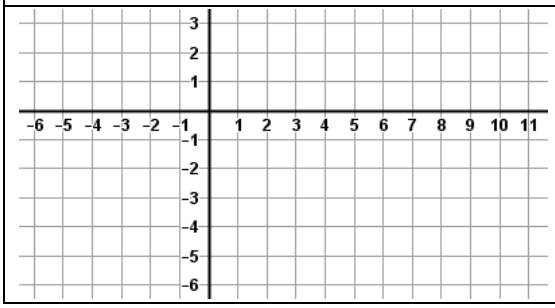
$f(x) = -\frac{1}{2}(x + 3)^2 + 2$

Domain:
Range:
Continuity:
Zero(s):
Extrema:
Intervals of Inc/Dec/Constant:
End behavior:

$f(x) = 2\sqrt{x - 1} - 6$

Domain:
Range:
Continuity:
Zero(s):
Extrema:
Intervals of Inc/Dec/Constant:
End behavior:

Partner Names:

Use the graphs from each partner to sketch the piecewise function.

Use open circles for any values restricted from the domain. Use closed circles for endpoints included in the domain.

$f(x) = \begin{cases} 2\|x + 4\|, x < -3 \\ -\frac{1}{2}(x + 3)^2 + 2, -3 < x < 1 \\ 2\sqrt{x - 1} - 6, 1 < x \leq 10 \end{cases}$	Domain:	Range:
	Continuity:	Zero(s):
	Extrema:	
	Intervals of Inc/Dec/Constant:	
	End behavior:	

How are the individual functions similar and different to the piecewise function? What accounts for the differences? (Continue answer on the back if you need more room.)