

HW 22

absolute value wkst

1. $f(x) = |x| + 3$

2. $f(x) = -|x|$

3. $f(x) = -|x + 11|$

4. $f(x) = |x + 2| - 7$

5. $f(x) = -|x - 1| + 5$

6. ~~$f(x) = 3|x + 6|$~~ $f(x) = 3|x + 6|$

7. $f(x) = -|\frac{1}{4}x|$

8. $f(x) = |5x| - 2$

9. $f(x) = |x - 2| - 3$

D: $(-\infty, \infty)$

R: $[-3, \infty)$

10. $f(x) = -|x| + 2$

D: $(-\infty, \infty)$

R: $(-\infty, -2]$

11. $f(x) = -|x + 3|$

D: $(-\infty, \infty)$

R: $(-\infty, 0]$

12. $f(x) = -|x + 2|$

D: $(-\infty, \infty)$

R: $(-\infty, 0]$

13. $f(x) = -\sqrt{x - 3} + 1$

D: $(-\infty, 3]$

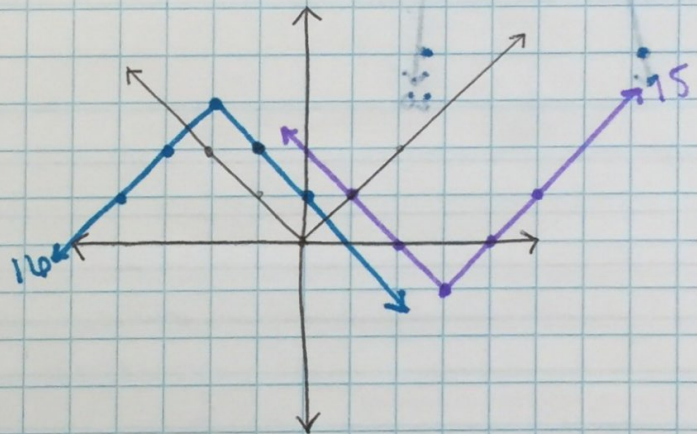
R: $[1, \infty)$

14. $f(x) = -(x + 4)^2 + 5$

D: $(-\infty, \infty)$

R: $(-\infty, 5]$

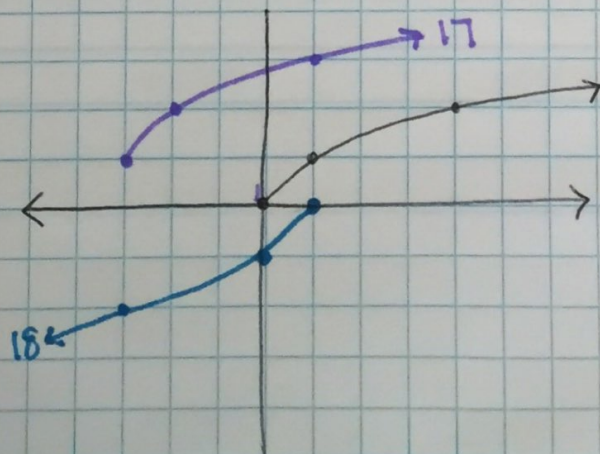
15. $a(x) = -1 + |x - 3|$ right 3, down 1



16. $b(x) = 3 - |x + 2|$ flip over x-axis, up 3, left 2

17. $c(x) = 1 + \sqrt{x + 3}$ up 1, left 3

18. $d(x) = -\sqrt{-(x - 1)}$ flip over x & y, right 1



20. ~~19~~ $f(x) = -2 - (x+1)^2$ flip over x-axis, left 1, down 2

19. ~~20~~ $g(x) = 1 + (x-2)^2$ ~~left~~ ^{right} 2, up 1

