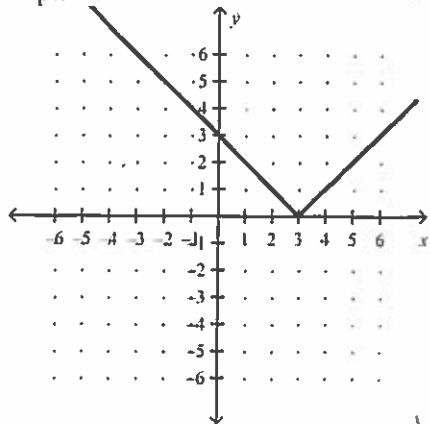
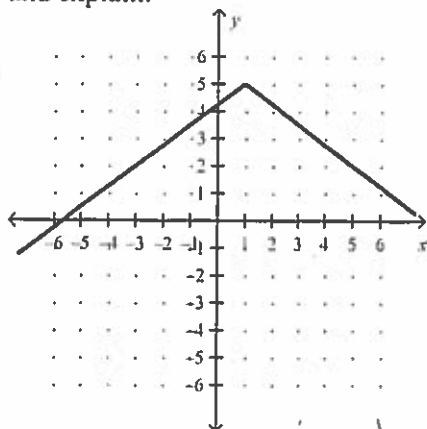


5. Shiva's answers for $y = |x - 3|$ are below? Are his answers correct? If not, fix the mistakes and explain.



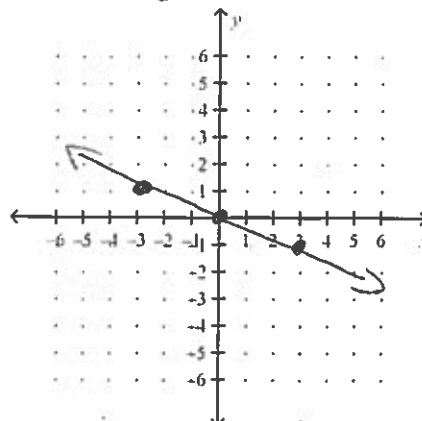
Domain: $[-\infty, \infty]$ correct
 Range: $[0, \infty)$ correct
 Increasing: $(0, \infty)$ wrong $(3, \infty)$
 Decreasing: $(-\infty, 0)$ wrong $(-\infty, 3)$

6. Tanner's answers for $y = -\frac{3}{4}|x - 1| + 5$ are below? Are his answers correct? If not, fix the mistakes and explain.



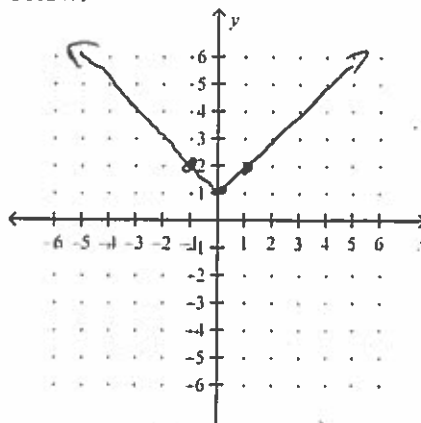
Domain: $(-\infty, \infty)$ correct
 Range: $[5, \infty)$ wrong $(-\infty, 5]$
 Increasing: $(1, \infty)$ wrong $(-\infty, 1)$
 Decreasing: $(-\infty, 1)$ wrong $(1, \infty)$

7. Graph $y = -\frac{1}{3}x$



Domain: $(-\infty, \infty)$
 Range: $(-\infty, \infty)$
 Increasing: never
 Decreasing: $(-\infty, \infty)$

8. CHALLENGE: Graph ANY absolute value function of your choice then answer the questions below.



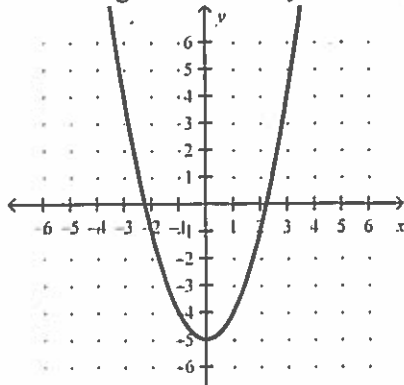
Domain: $(-\infty, \infty)$
 Range: $[1, \infty)$
 Increasing: $(0, \infty)$
 Decreasing: $(-\infty, 0)$

9. BIG CHALLENGE: What is the equation of the absolute value function that you graphed above?

$y = |x| + 1$

Unit 2B Test Review: Domain, Range, Increasing, Decreasing

1. Find the domain, range, and increasing and decreasing intervals for $y = x^2 - 5$.



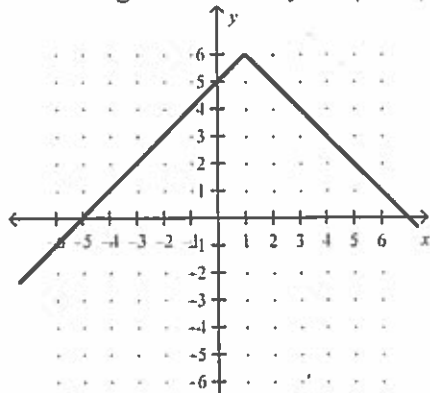
Domain: $(-\infty, \infty)$

Range: $[-5, \infty)$

Increasing: $(0, \infty)$

Decreasing: $(-\infty, 0)$

2. Find the domain, range, and increasing and decreasing intervals for $y = -|x + 1| + 6$.



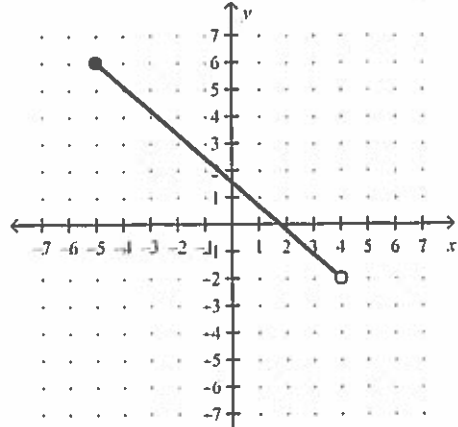
Domain: $(-\infty, \infty)$

Range: $(-\infty, 6]$

Increasing: $(-\infty, -1)$

Decreasing: $(-1, \infty)$

3. Find the domain, range, and increasing and decreasing intervals for $y = |x + 1| + 6$.



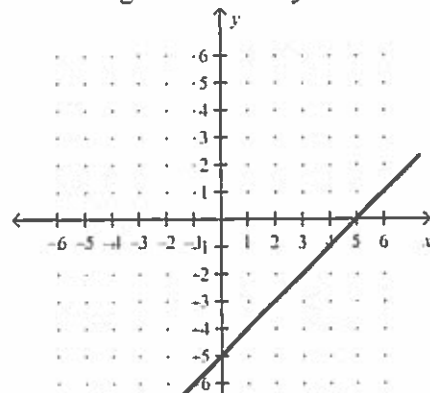
Domain: $[-5, 4)$

Range: $[-2, 6]$

Increasing: never

Decreasing: $(-5, 4)$

4. Find the domain, range, and increasing and decreasing intervals for $y = x - 5$.



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

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

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

Decreasing: never