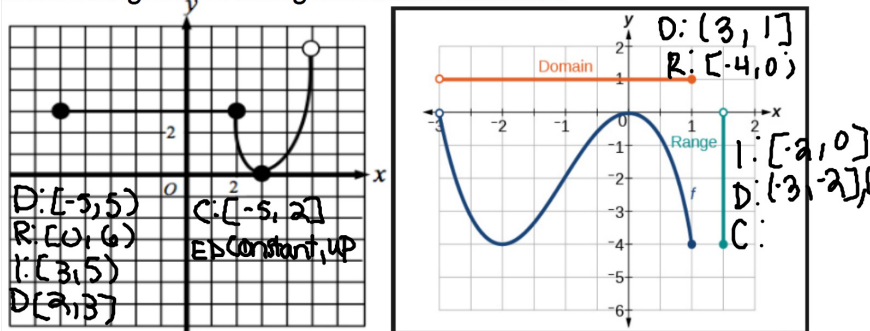


Warm-up

1. Identify parent function and the following transformation

- a) $y = -(x-2)^3$ cubic, reflects across x-axis, H.T right 2
- b) $y = (x+2)^2 - 3$ quad, H.T left 2, V.T down 3
- c) $1/2|x-2| + 3$ Abs. value, V.C $y/2$, H.T right 2, V.T up 3

2. Identify the domain/ range, end behavior, and increasing/decreasing/constant intervals



SAT Question of the day

If $(2x - 5)(2x + 5) = 5$, what is the value of $4x^2$?

- (A) -30
- (B) -20
- (C) 10
- (D) 20
- (E) 30

$$\begin{array}{r}
 2x - 5 \\
 2x \begin{array}{|c|c|} \hline 4x^2 & -10x \\ \hline \end{array} \\
 5 \begin{array}{|c|c|} \hline 10x & -25 \\ \hline \end{array} \\
 \hline
 4x^2 - 25 = 5 \\
 +25 +25 \\
 \hline
 4x = 30
 \end{array}$$

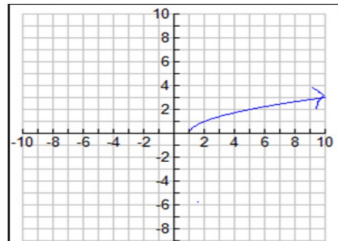
Whiteboard Review

Identify the the transformations:

- 1. $y = -(x - 2)^2$
reflect across x-axis, H.T right 2
- 2. $y = (x + 2)^3 - 3$
H.T left 2, V.T down 3
- 3. $y = .5|x - 2| + 3$
V.C by .5, H.T right 2, V.T up 3

4. Identify the Domain and Range

D: $[1, \infty)$
R: $[0, \infty)$

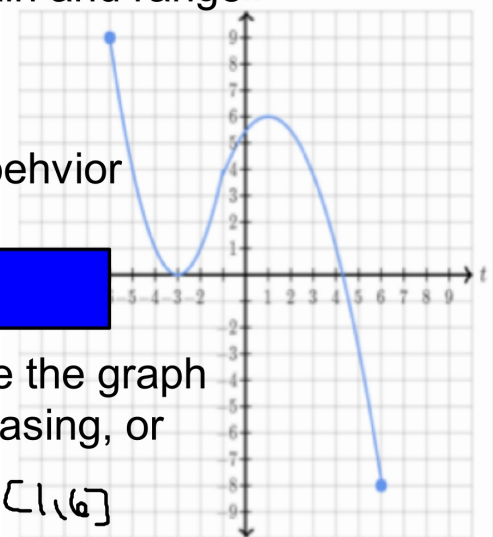


5. Identify the domain and range

D: $[-6, 6]$
R: $[-8, 9]$

6. Identify the end behavior

up, down



7. Identify the where the graph is increasing, decreasing, or constant

I: $[-3, 1]$
D: $[-6, -3], [1, 6]$
C: