

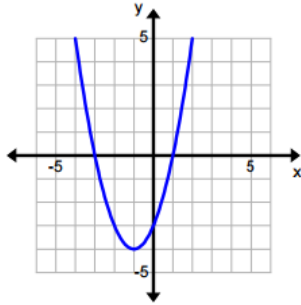
Secondary Math 2

3.3 Increase/Decrease/Constant

Name: _____ Period _____

Find where the graph is increasing, decreasing or constant.

1.

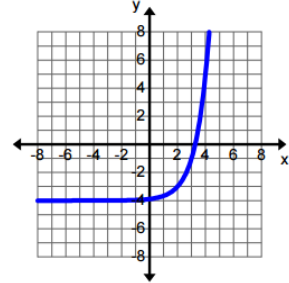


I:

D:

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2.

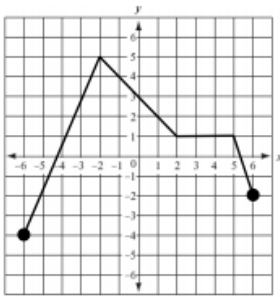


I:

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3.

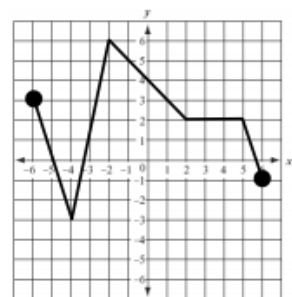


I:

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4.

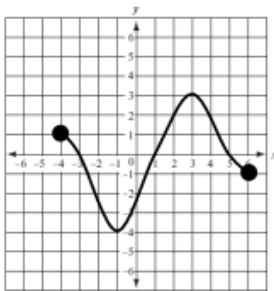


I:

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5.

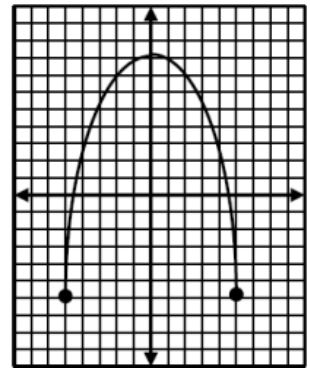


I:

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6.

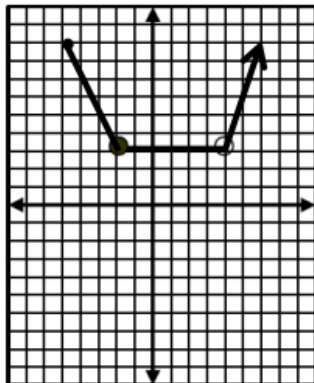


I:

D:

C:

7.

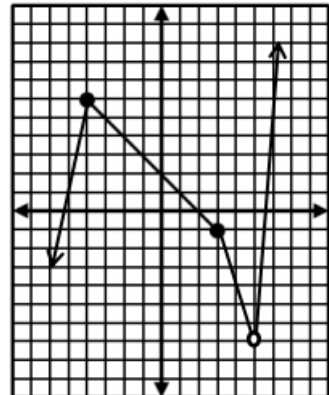


I:

D:

C:

8.



I:

D:

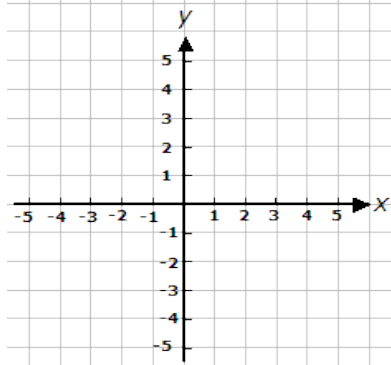
C:

Do the following.

A. Graph

B. Find Increasing, Decreasing, Constant

9. $f(x) = x^2 + 2x - 3$

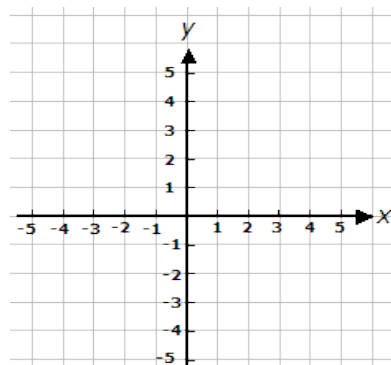


I:

D:

C:

10. $f(x) = \sqrt[3]{x+2} - 1$

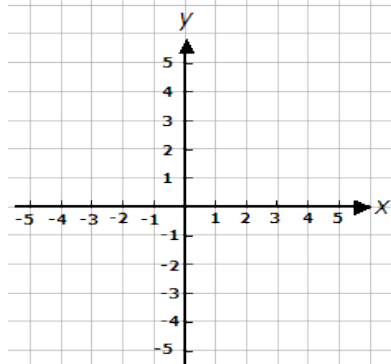


I:

D:

C:

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

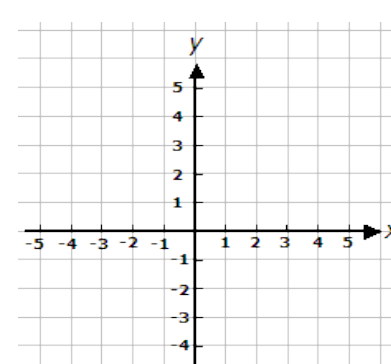


I:

D:

C:

12. $f(x) = -(x+2)^2 + 3$

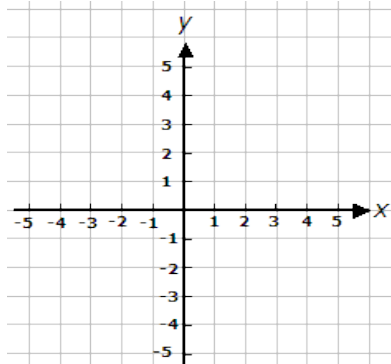


I:

D:

C:

13. $f(x) = \begin{cases} |x-1| + 2 & \text{if } x \leq 1 \\ 2x - 1 & \text{if } x > 1 \end{cases}$

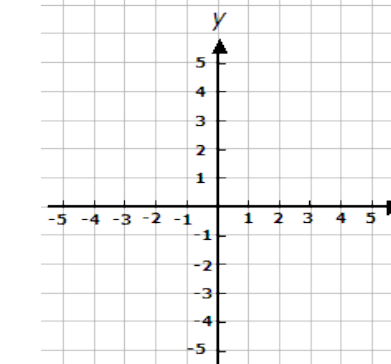


I:

D:

C:

14. $f(x) = \begin{cases} -3 & \text{if } x < 2 \\ x^2 - 5 & \text{if } x \geq 2 \end{cases}$

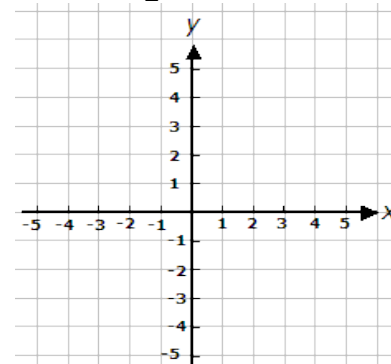


I:

D:

C:

15. $f(x) = \frac{1}{2}x + 3$

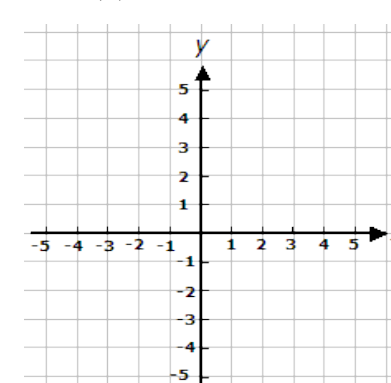


I:

D:

C:

16. $f(x) = 2\sqrt{x-3}$



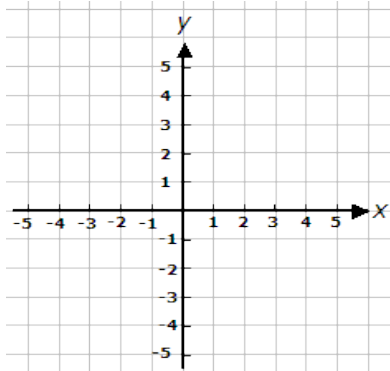
I:

D:

C:

Graph the equation then state the domain and range.

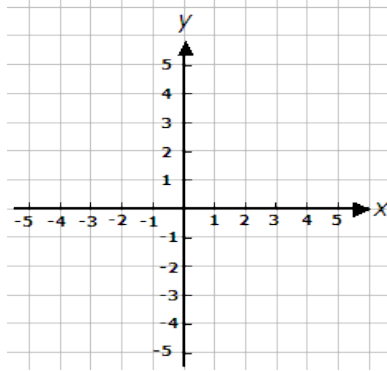
17. $f(x) = (x-2)^2 - 2$



D:

R:

18. $f(x) = \sqrt{x} + 2$



D:

R:

Find the x and y intercepts for each function.

19. $3x + 7y = 21$

x:

y:

20. $f(x) = x^2 + 7x + 12$

x:

y:

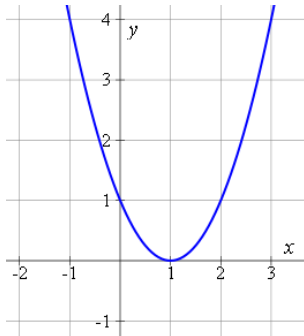
Find the maximum or minimum.

21. $f(x) = (x-1)^2 + 4$

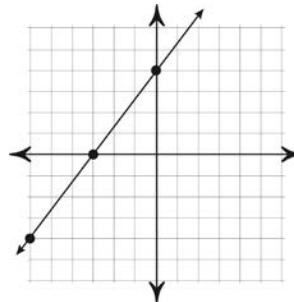
22. $f(x) = 2(x-2)^2 + 8$

Determine if the following is a linear, quadratic or exponential function.

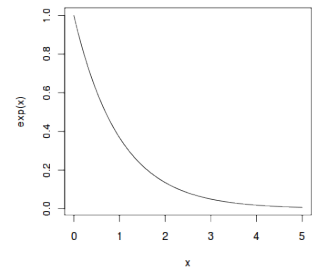
23.



24.



25.



Describe the transformations.

26. $f(x) = -(x-2)^2 - 3$

VST/VSH/N

Up/Down =

Left/Right =

Reflection: Yes/No

27. $f(x) = -3|x+1| + 7$

VST/VSH/N

Up/Down =

Left/Right =

Reflection: Yes/No