

Name: _____ Period: _____

Score: _____ / _____ %

HW 2-4 HONORS: Increasing, Decreasing, & Extrema

Identify the indicated characteristics for each graph using set builder and interval notation.

1. Increasing

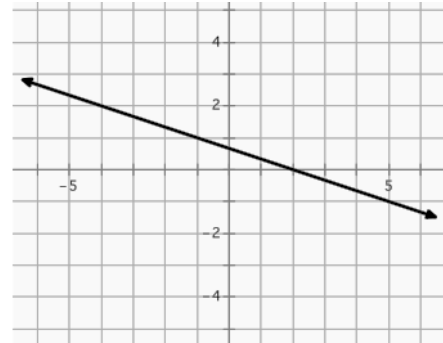
Set Builder:

Interval:

2. Decreasing

Set Builder:

Interval:



3. Extrema

Minimum: _____ Maximum: _____

4. $f(-4)$ 5. $f(x) = 1$

6. Increasing

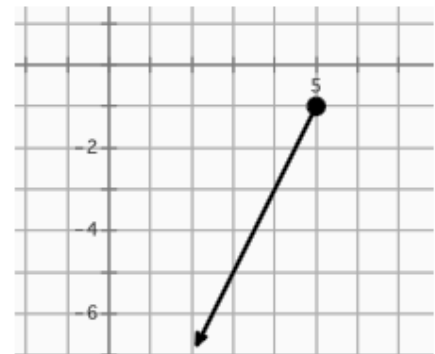
Set Builder:

Interval:

7. Decreasing

Set Builder:

Interval:



8. Extrema

Minimum: _____ Maximum: _____

9. $f(3)$ 10. $f(x) = -1$

11. Increasing

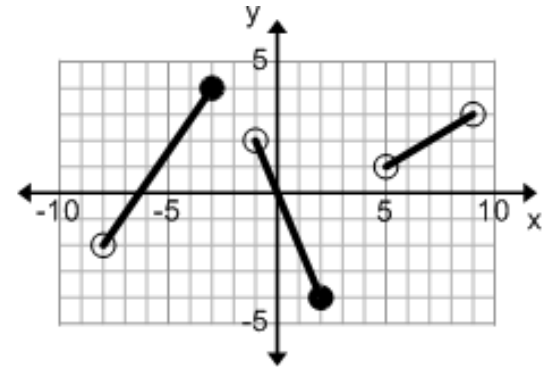
Set Builder:

Interval:

12. Decreasing

Set Builder:

Interval:



13. Extrema

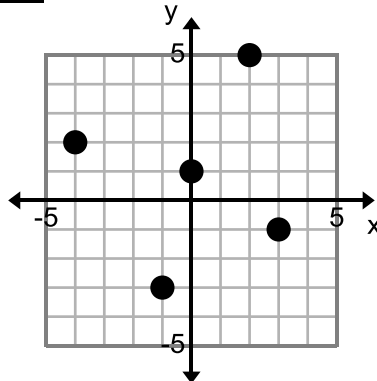
Minimum: _____ Maximum: _____

14. $f(1)$ 15. $f(x) = -2$

Identify the indicated characteristics for each graph using set builder notation.

16. Increasing
Set Builder:

17. Decreasing
Set Builder:



18. Extrema
Minimum: Maximum:

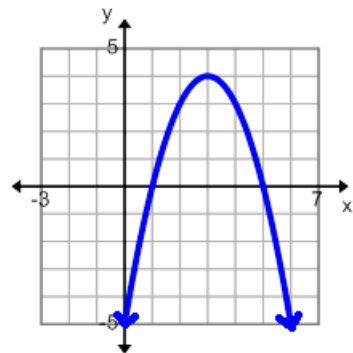
19. $f(-4)$ **20. $f(x) = -1$**

1. 21. Increasing
Set Builder:

Interval:

22. Decreasing
Set Builder:

Interval:



23. Extrema
Minimum: Maximum:

24. $f(1)$ **25. $f(x) = 4$**

Answer the following problems in **INTERVAL NOTATION**.

26. Is the graph below a function? _____ Why?

27. Domain: _____ Range: _____

28. Continuity: (circle your answer) Continuous, Non-Continuous, or Discrete?

29. Increasing: _____ Decreasing: _____

30. minimum: _____ maximum: _____

