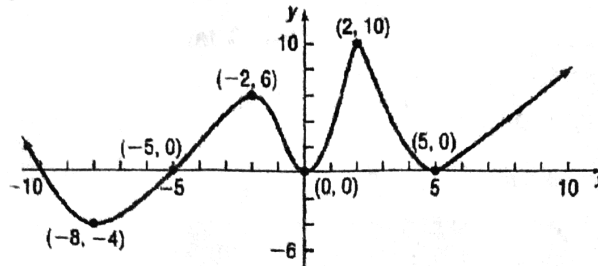


Success is the maximum utilization of the ability you have. – Zig Ziglar

In problems 1-8, use the given graph of the function f .

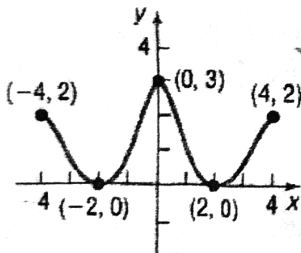


- | | |
|---|---|
| 1 | Is f increasing on the interval $(-8, -2)$? |
| 2 | Is f increasing on the interval $(2, 10)$? |
| 3 | List the interval(s) on which f is increasing. Justify your answer. |
| 4 | List the interval(s) on which f is decreasing. Justify your answer. |
| 5 | List the value(s) of x at which f has a local maximum. Justify your answer. |
| 6 | List the value(s) of x at which f has a local minimum. Justify your answer. |
| 7 | Find the x -intercepts. |
| 8 | Find the y -intercepts. |

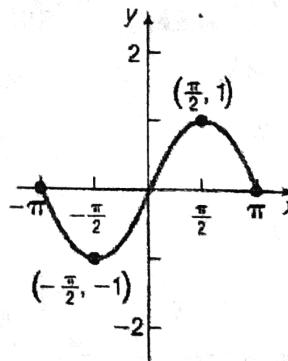
For problems 9-12, the graph of a function is given. Use the graph to find:

- Its domain and range
- The x - and y - intercepts
- The intervals of increase. Justify.
- The intervals of decrease. Justify.
- The intervals of constant. Justify.

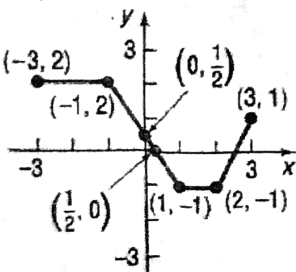
9.



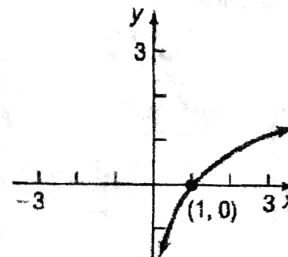
10.



11.



12.



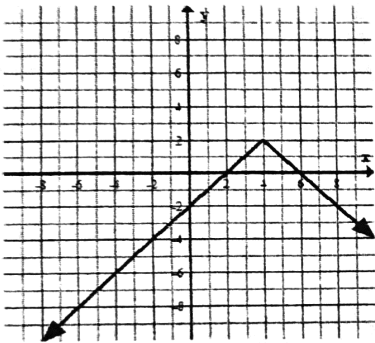
Algebra 2 Worksheet
 AII.7f – End Behavior

Name: _____

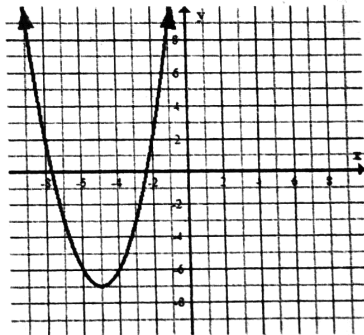
Determine the end behavior for each function below. Place the letter(s) of the appropriate statement(s) on the line provided.

- A. As x approaches ∞ , y approaches ∞
- B. As x approaches $-\infty$, y approaches ∞
- C. As x approaches ∞ , y approaches $-\infty$
- D. As x approaches $-\infty$, y approaches $-\infty$

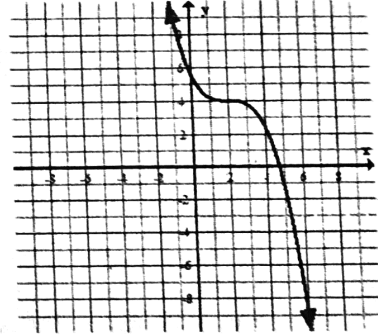
1. _____



2. _____



3. _____



Give the end behavior for each function by filling in each blank.

4. As x approaches _____, y approaches _____
 As x approaches _____, y approaches _____

5. As x approaches _____, y approaches _____
 As x approaches _____, y approaches _____

