BM 3 End Behavior Worksheet Name _____

Block _____ Date_____

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

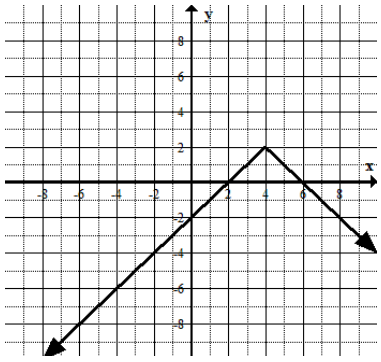
A. As x approaches ∞, y approaches ∞

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

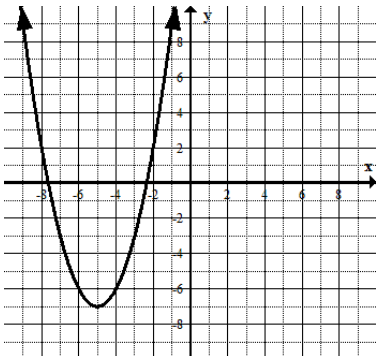
C. As x approaches ∞, y approaches $-\infty$

D. As x approaches $-\infty$, y approaches $-\infty$

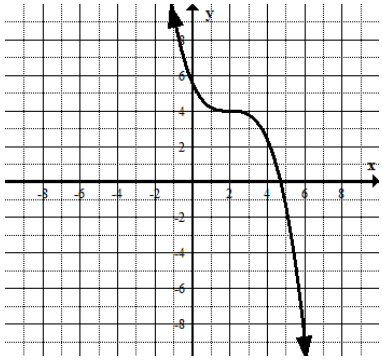
1. _____



2. _____



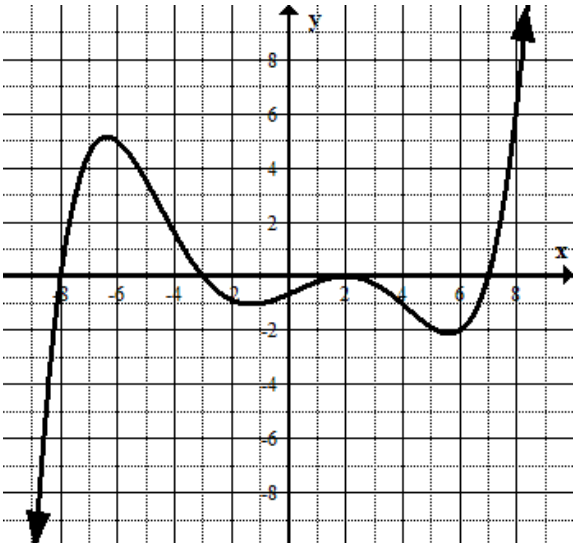
3. _____



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

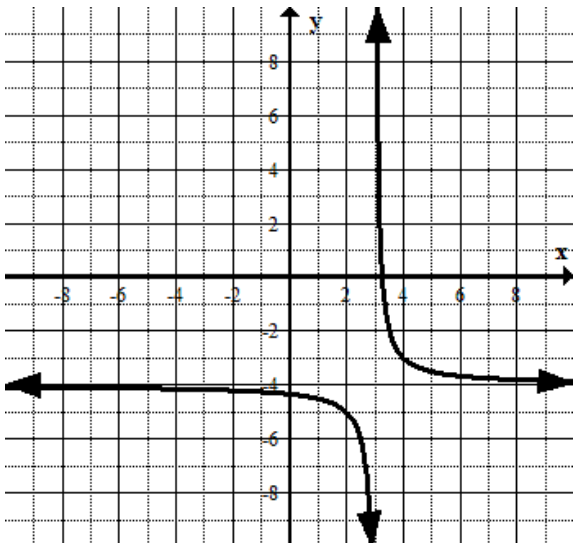
4. As x approaches ____, y approaches ____

As x approaches ____, y approaches ____



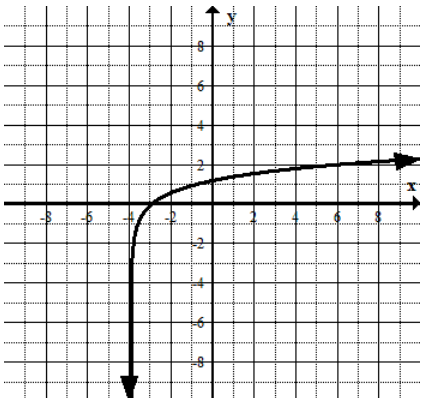
5. As x approaches ____, y approaches ____

As x approaches ____, y approaches ____

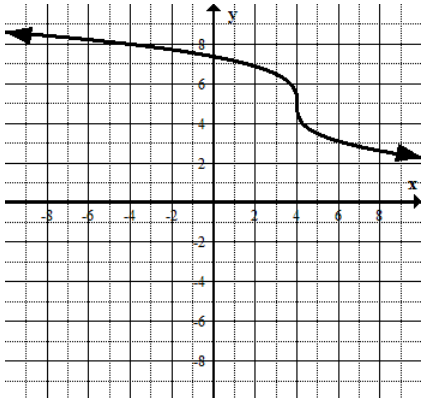


Give the end behavior for each function.

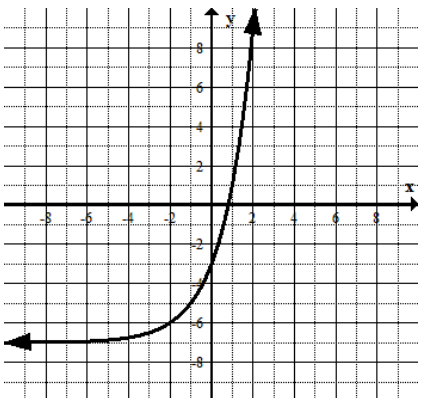
6.



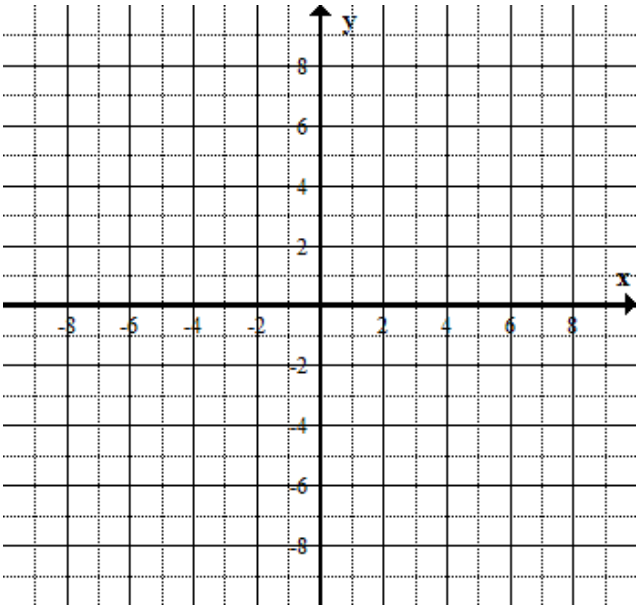
7.



8.

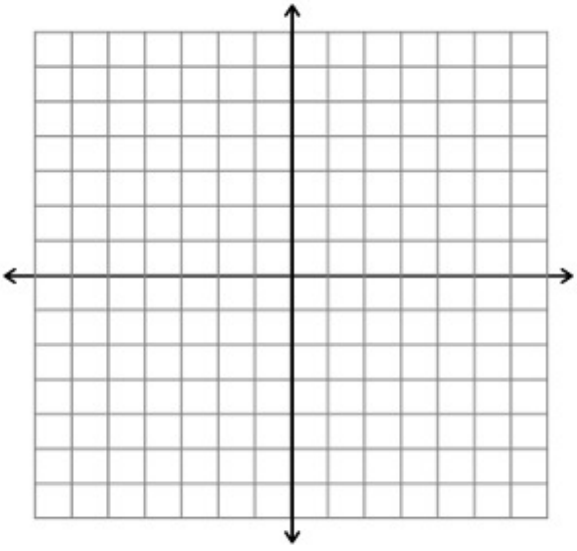


9. Sketch the graph of $y = \sqrt{x+5} + 2$. What is the end behavior of this function? Explain your answer.



Sketch a graph that has the given end behavior.

10. As x approaches -∞, y approaches ∞
As x approaches ∞, y approaches ∞



11. As x approaches -∞, y approaches -∞
As x approaches ∞, y approaches