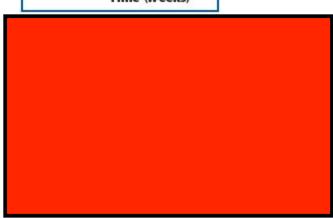
1-8 Interpreting Graphs of Functions

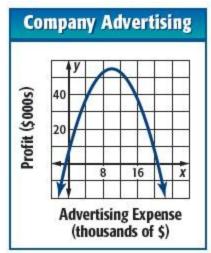
ORGANIZE IDEAS Identify the function graphed as *linear* or *nonlinear*. Then estimate and interpret the intercepts of the graph, any symmetry, where the function is positive, negative, increasing, and decreasing, the *x*-coordinate of any relative extrema, and the end behavior of the graph.

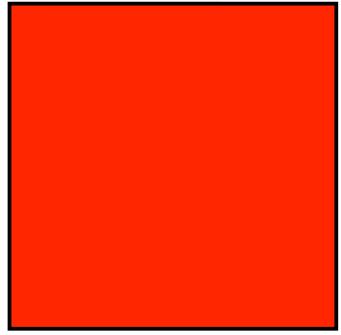
4.





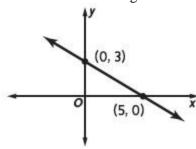
6.





1-8 Interpreting Graphs of Functions

23. Which of the following best describes the graph?



A The *x*-intercept is 3; the *y*-intercept is 5; the graph is positive for x < 5; the graph is negative for x > 5.

B The *x*-intercept is 5; the *y*-intercept is 3; the graph is positive for x < 5; the graph is negative for x > 5.

C The x-intercept is 5; the y-intercept is 3; the graph is positive for x > 5; the graph is negative for x < 5.

D The *x*-intercept is 5; the *y*-intercept is 3; the graph is positive for x > 0; the graph is negative for x < 0.

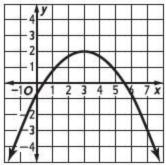


24. **GRIDDABLE** Thomas graphs the function y = 3(x)

-6)². What is the *x*-intercept of the function?



 $25. \ Which statement best describes the graph shown. \\$



 ${\bf F}$ The graph is linear.

G The graph is nonlinear.

H There are two *y*-intercepts.

 ${f J}$ The graph is increasing.