Section 7-2 Identifying functions from Graph Patterns

*Review notes from Section 1-2 (4 main graphs to know: linear, quadratic, exponential, power)

*Understand Concave Up or Concave Down

*For Linear Equations, remember Point-slope Form also

$y - y_1 = m(x - x_1)$ where m is slope and (x_1, y_1) is any point on the line

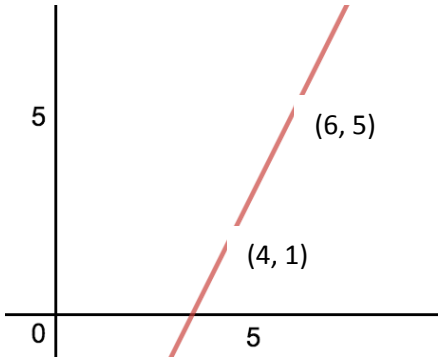
*For Quadratic Equations, remember Vertex Form also

$y - k = a(x - h)^2$ where (h,k) is vertex and a is vertical dilation (narrow or wide)

For each example below:

A. Identify the type of function it could be.
B. On what interval or intervals is the function increasing or decreasing, and which way is the graph concave?
C. From your experience, what relationship in the real world could be modeled by a function with this shape of graph?
D. Find the particular equation for the function if the given points are on the graph.
E. Confirm that your equation gives the graph shown (check on graphing calculator).

1.



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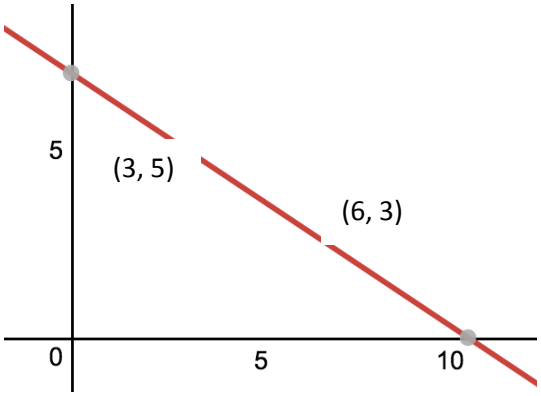

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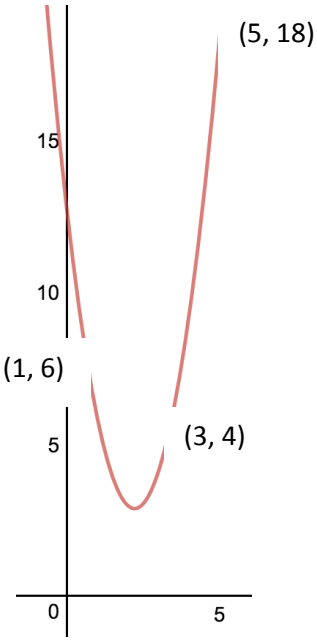

4.