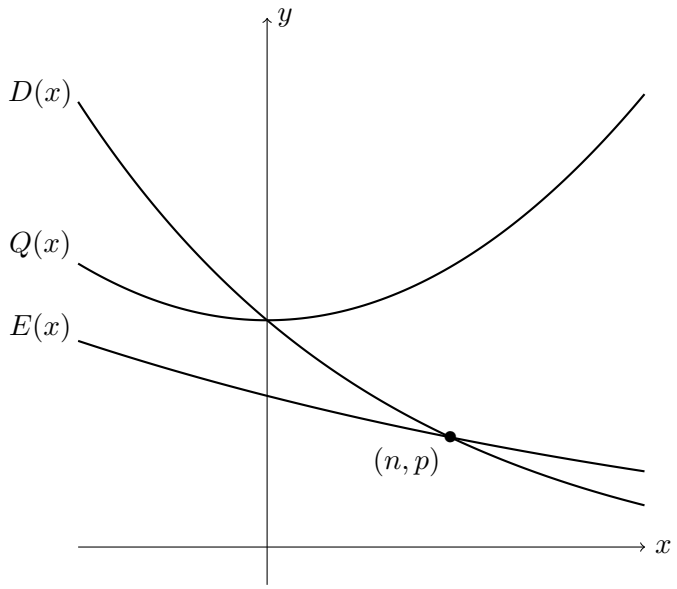
10. [8 points] The functions $D(x)$, $E(x)$, and $Q(x)$ are pictured below.



Suppose that

- $D(x) = d(1+r)^x$ is an exponential function.
- $E(x) = (1+h)^x$ is an exponential function.
- $Q(x) = ax^2 + c$ is a quadratic function.
- $D(x)$ and $E(x)$ intersect at the point (n, p).

In the formulas above, a, c, d, h, n, p, r are constants.

In each of the bullet points below, you are asked to circle the option that **must** be true based on the graph above. If there is **not enough information** to decide on any of the options in a given row, circle N/A.

- The constants r and h satisfy:

  $\boxed{r < h}$ $\qquad$ $r > h$ $\qquad$ $r = h$ $\qquad$ N/A

- The constants c and d satisfy:

  $c < d$ $\qquad$ $c > d$ $\qquad$ $\boxed{c = d}$ $\qquad$ N/A

- The constants a and h satisfy:

  $a < h$ $\qquad$ $\boxed{a > h}$ $\qquad$ $a = h$ $\qquad$ N/A

- Suppose that we decrease the value of r. Then the value of n:

  Increases $\qquad$ $\boxed{\text{Decreases}}$ $\qquad$ Stays the Same $\qquad$ N/A

