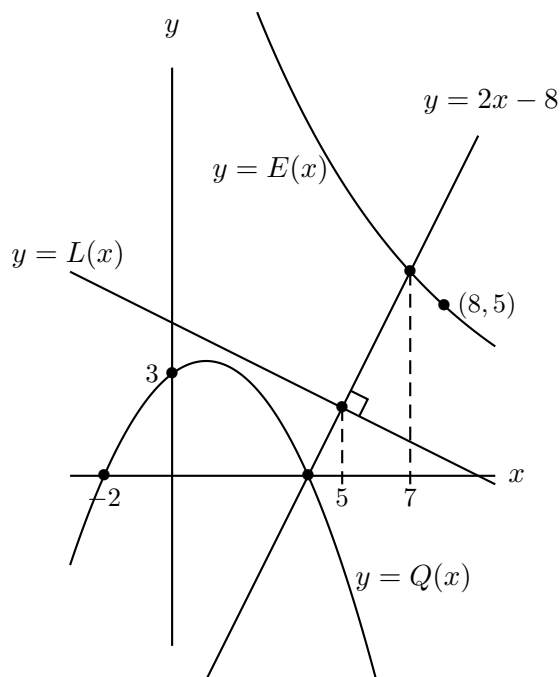


2. [10 points] The graph of $y = 2x - 8$ and of three functions L , Q , and E are shown below. Note that L is linear, Q is quadratic, and E is exponential. Use the information shown in the graph to find formulas for $L(x)$, $Q(x)$, and $E(x)$. Graphs may not be drawn to scale, so be careful! Use only the information that is labeled in the graph. Show your work clearly and leave all numbers in EXACT FORM.



Remember: Show your work clearly in the space on this page, and leave all numbers in EXACT FORM. Write your final answers in the answer blanks below.

$$L(x) = \underline{\hspace{10em}}$$

$$Q(x) = \underline{\hspace{10em}}$$

$$E(x) = \underline{\hspace{10em}}$$

3. [4 points] Find the average rate of change of the function $g(t) = 2t^2 - 3t + 4$ between $t = -1$ and $t = -1 + h$. For full credit, simplify your answer as much as possible.