A line with slope 5 passes through the vertex of this parabola. Does it intersect the parabola in another point (other than the vertex)? If so, find the point of intersection. If not, explain why.



Think of all possible lines that pass through the vertex of the parabola shown above. Which lines intersect the parabola again at another point and which ones do not? Explain.

Think of all possible lines with a slope of 5. Which of these lines intersect the parabola shown above? How many times? Explain.