Definition 1. *Define the function g by the formula $g(k) = -3|4k - 5| + 1$ with domain $(-\infty, \infty)$.*

Exercise 1 *The graph of $g(k)$ is best described by which of the following?*

Multiple Choice:

(a) *Line*

(b) *Ray*

(c) *V-shaped* ✓

(d) *Parabola*

(e) *Sideways Half-Parabola*

Exercise 2 *The graph of $g(k)$ includes what type of point?*

Multiple Choice:

(a) *a highest point* ✓

(b) *a lowest point*

(c) *neither*

Exercise 3 *The graph of $g(k)$ opens up or down?*

Multiple Choice:

(a) *up*

(b) *down* ✓

(c) *neither*

Exercise 4 *Which domain number is associated with this extreme point? domain number is* $\boxed{5/4}$ *.*

Exercise 5 *How many k-intercepts does the graph of $g(k)$ have?*

Multiple Choice:

(a) 0

(b) 1

(c) 2 ✓