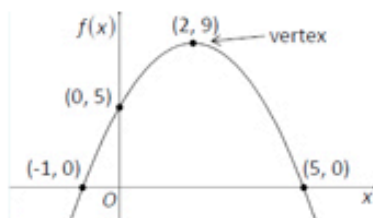


# High School – Functions

A portion of the graph of a quadratic function  $f(x)$  is shown in the  $xy$  - plane. Selected values of a linear function  $g(x)$  are shown in the table.



| $x$ | $g(x)$ |
|-----|--------|
| -4  | 7      |
| -1  | 1      |
| 2   | -5     |
| 5   | -11    |

For each comparison below, use the drop-down menu to select a symbol that correctly indicates the relationship between the first and the second quantity.

| First Quantity   | Comparison                     | Second Quantity  |
|--|--------------------------------|--|
| The y-coordinate of the y-intercept $f(x)$                 | <input type="text" value="⌵"/> | The y-coordinate of the y-intercept $g(x)$                 |
| $f(3)$   | <input type="text" value="⌵"/> | $g(3)$   |
| Maximum value of $f(x)$ on the interval $-5 \leq x \leq 5$ | <input type="text" value="⌵"/> | Maximum value of $g(x)$ on the interval $-5 \leq x \leq 5$ |
| $\frac{f(5) - f(2)}{5 - 2}$                                | <input type="text" value="⌵"/> | $\frac{g(5) - g(2)}{5 - 2}$                                |