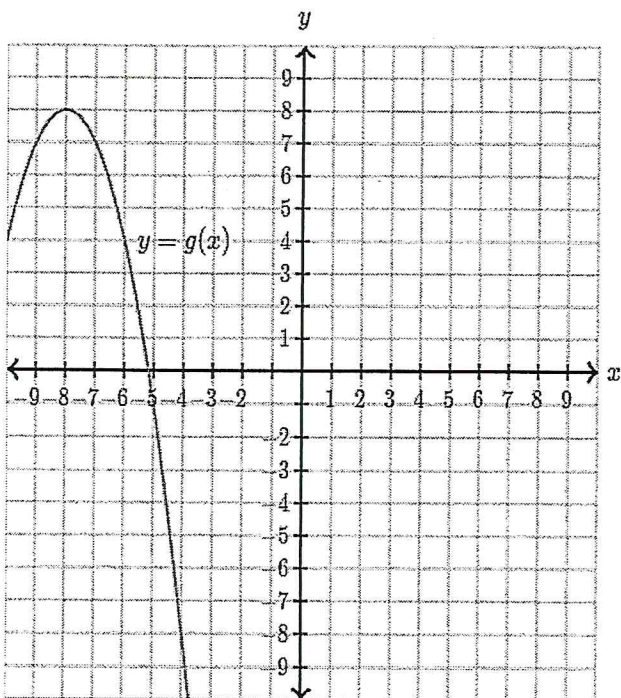Compare Quadratic Functions – Practice

1.

Which function has a greater maximum?

$$f(x) = -25x^2 - 30x - 1$$
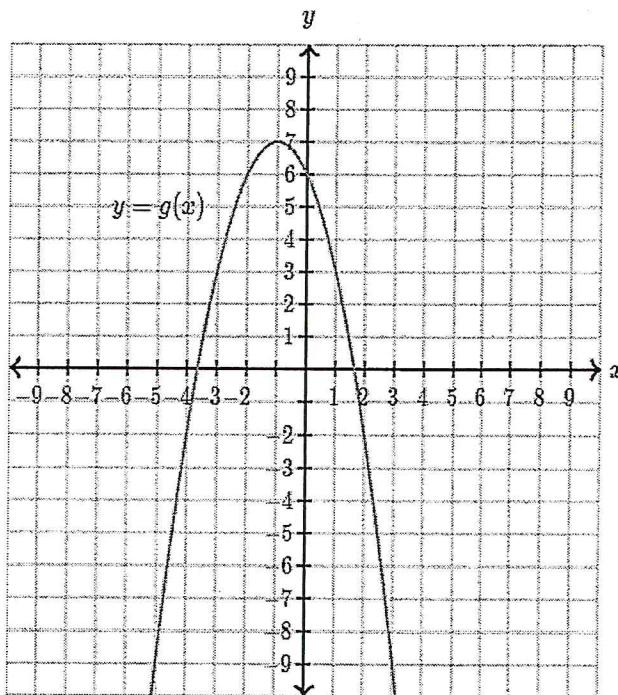

○ f has a greater maximum than g.

○ g has a greater maximum than f.

○ f and g share the same maximum.

2.

Which function has a greater y-intercept?

$$f(x) = 6x^2 + 18x + 3$$

○ f has a greater y-intercept than g.

○ g has a greater y-intercept than f.

○ f and g share the same y-intercept.

3.

Do the functions have the same concavity? _____

$$f(x) = -x^2 + 40x + 120$$

Some points for g(x) are given in the following table

X	-8	-7	-4	-1	0
y	-6	-0	8	0	-6