

Math 1A 105 DIS Quiz 1

5 Sept 2018

Name: _____

Score: _____

1. For each of the following functions, (i) sketch its graph and (ii) state its domain. (2 points each)

(a) $f(x) = \cos x$

(b) $g(x) = \sqrt{x + 4}$

(c) $h(x) = 1 + \frac{1}{x}$

2. (a) Let $f(x) = \frac{x}{1-x^2}$, $g(x) = \sin x$.
- i. Determine whether each of f and g is even, odd, or neither. (2 points)
 - ii. What is the function $f \circ g$? (1 point)
- (b) Show that if f and g are odd functions, then $f \circ g$ is an odd function. (1 point)