

Solutions:

1. a) does not exist

b) -3

2. a) $-\frac{1}{2}$

e) -1

i) -4

b) $\frac{1}{6}$

f) 0

j) -1

c) $\frac{3}{5}$

g) ∞

k) does not exist

d) 2

h) does not exist

l) $\frac{1}{2}$

3. Evaluate the limit, if it exists. (Limits can evaluate to ∞ or $-\infty$).

a) ∞

b) $-\frac{1}{2}$

c) $\frac{1}{6}$

3. a) choose $\delta = \frac{\epsilon}{2}$

b) choose $\delta = \frac{\epsilon}{3}$

c) choose $\delta = \min\{1, \frac{\epsilon}{8}\}$

4. a) not continuous

b) not continuous

c) continuous