

RL 3.31.20 Limits Fractions

Date _____ Period _____

Evaluate each limit.

$$1) \lim_{x \rightarrow 0} \frac{\frac{1}{4+x} - \frac{1}{4}}{x}$$

$$2) \lim_{x \rightarrow -4} \frac{x}{\frac{1}{4+x} - \frac{1}{4}}$$

$$3) \lim_{x \rightarrow 1} \frac{x}{\frac{1}{-1+x} + 1}$$

$$4) \lim_{x \rightarrow 0} \frac{\frac{1}{3+x} - \frac{1}{3}}{x}$$

$$5) \lim_{x \rightarrow 7} \frac{x}{\frac{1}{-7+x} + \frac{1}{7}}$$

$$6) \lim_{x \rightarrow 0} \frac{\frac{1}{-7+x} + \frac{1}{7}}{x}$$

$$7) \lim_{x \rightarrow 0} \frac{\frac{1}{7+x} - \frac{1}{7}}{x}$$

$$8) \lim_{x \rightarrow 6} \frac{x}{\frac{1}{-6+x} + \frac{1}{6}}$$

$$9) \lim_{x \rightarrow 0} \frac{x}{\frac{1}{-1+x} + 1}$$

$$10) \lim_{x \rightarrow 0} \frac{\frac{1}{-1+x} + 1}{x}$$

Answers to RL 3.31.20 Limits Fractions (ID: 1)

1) $-\frac{1}{16}$

5) 0

9) -1

2) 0

6) $-\frac{1}{49}$

10) -1

3) 0

7) $-\frac{1}{49}$

4) $-\frac{1}{9}$

8) 0