Name: _Richard_

I'm in the Thurs11 Thurs12 Thurs1 or Fri10 recitation. (Circle one)

MATH 200 – QUIZ 2

1. (1 point) $\lim\limits_{x\to 5} \sqrt{5} = \boxed{\sqrt{5}}$
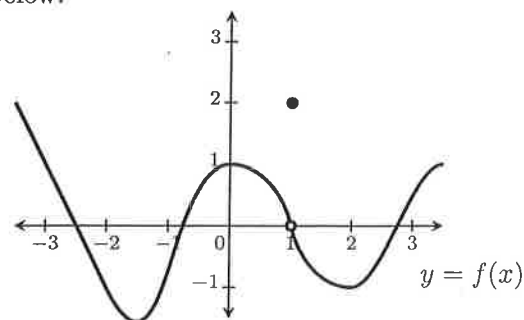
2. (1 point) $\lim\limits_{t\to 8} t = \boxed{8}$

3. (4 points) $\lim\limits_{x\to -2} \dfrac{-2x-4}{x^3+2x^2} = \lim\limits_{x\to -2} \dfrac{-2(x+2)}{x^2(x+2)} = \lim\limits_{x\to -2} \dfrac{-2}{x^2} = \dfrac{-2}{(-2)^2} = -\dfrac{2}{4} = \boxed{-\dfrac{1}{2}}$

4. (6 points) Supply the following information for the function graphed below.

(a) $\lim\limits_{x\to 0} f(x) = \boxed{1}$

(b) $\lim\limits_{x\to 1} f(x) = \boxed{0}$

(c) $f(1) = \boxed{2}$

$y = f(x)$

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1. (1 point) $\lim\limits_{x\to 5} \sqrt{2} = \boxed{\sqrt{2}}$

2. (1 point) $\lim\limits_{t\to 2} t = \boxed{2}$

3. (4 points) $\lim\limits_{x\to 9} \dfrac{\sqrt{x}-3}{x-9} = \lim\limits_{x\to 9} \dfrac{\sqrt{x}-3}{\sqrt{x}^2-3^2} = \lim\limits_{x\to 9} \dfrac{\sqrt{x}-3}{(\sqrt{x}-3)(\sqrt{x}+3)} = \lim\limits_{x\to 9} \dfrac{1}{\sqrt{x}+3}$

$= \dfrac{1}{\sqrt{9}+3} = \boxed{\dfrac{1}{6}}$

4. (6 points) Supply the following information for the function graphed below.

(a) $\lim\limits_{x\to 0} f(x) = \boxed{3}$

(b) $\lim\limits_{x\to 1} f(x) = \boxed{2}$

(c) $f(1) = \boxed{1}$

$y = f(x)$
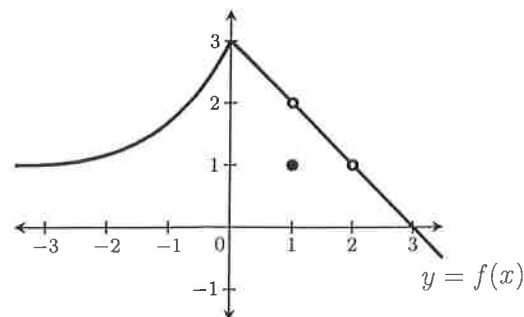
Name: _Richard_   September 5, 2012

I'm in the Thurs11 Thurs12 Thurs1 or Fri10 recitation. (Circle one)   MATH 200 – QUIZ 2

1. (1 point) $\lim\limits_{x \to 5} \sqrt{3} =$ $\boxed{\sqrt{3}}$

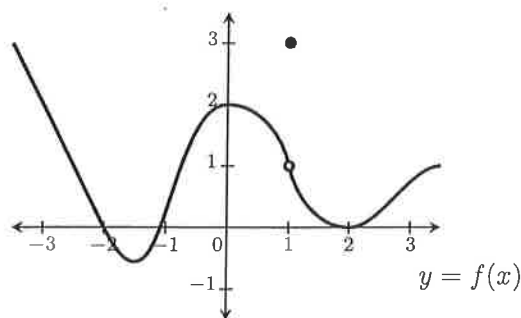2. (1 point) $\lim\limits_{t \to 15} t =$ $\boxed{15}$

3. (4 points) $\lim\limits_{x \to 1} \dfrac{\frac{1}{x} - 1}{x - 1} =$ $\lim\limits_{x \to 1} \dfrac{\frac{1}{x} - \frac{x}{x}}{x - 1} = \lim\limits_{x \to 1} \dfrac{\frac{1-x}{x}}{x-1} = \lim\limits_{x \to 1} \dfrac{1-x}{x} \cdot \dfrac{1}{x-1}$

$= \lim\limits_{x \to 1} \dfrac{-1}{x} = \dfrac{-1}{1} = \boxed{-1}$

4. (6 points) Supply the following information for the function graphed below.

(a) $\lim\limits_{x \to 2} f(x) =$ $\boxed{0}$

(b) $\lim\limits_{x \to 1} f(x) =$ $\boxed{1}$

(c) $f(1) =$ $\boxed{3}$

$y = f(x)$

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1. (1 point) $\lim\limits_{x \to 5} \sqrt{7} =$ $\boxed{\sqrt{7}}$

2. (1 point) $\lim\limits_{t \to 6} t =$ $\boxed{6}$

3. (4 points) $\lim\limits_{x \to 1} \dfrac{x^2 + x - 2}{x^2 - 1} =$ $\lim\limits_{x \to 1} \dfrac{(x-1)(x+2)}{(x+1)(x-1)} = \lim\limits_{x \to 1} \dfrac{x+2}{x+1} = \dfrac{1+2}{1+1} = \boxed{\dfrac{3}{2}}$

4. (6 points) Supply the following information for the function graphed below.

(a) $\lim\limits_{x \to 0} f(x) =$ $\boxed{2}$

(b) $\lim\limits_{x \to 1} f(x) =$ $\boxed{1}$

(c) $f(1) =$ $\boxed{0}$

$y = f(x)$