

Precalc – Warm Up – 2/8/11

Name: _____ Period: _____

1) Consider the function $f(x) = x^2 + 4x - 3$. Use your calculator to find the following:

a) $f(0.5)$

b) $f(0.8)$

c) $f(0.9)$

d) $f(0.99)$

e) Using just the answers from above guess the value of $f(1)$

Precalc – Limits by Calculator – 2/8/11

Name: _____

Period: _____

Students will be able to identify limits using a graphing calculator
--

1) Imagine that you have the following table

x	1	3	5	7	9
$f(x)$	5	9		17	21

Predict the value of $f(x)$ when $x=5$.

2) Now, consider a different table

x	2.9	2.95	3	3.05	3.1
$f(x)$	4.08	4.0964		4.1036	4.148

Predict the value of $f(x)$ when $x=3$.

3) Now, consider a third table

x	4.9	4.99	5	5.001	5.1
$f(x)$	6.210	6.202		6.198	6.14

Predict the value of $f(x)$ when $x=5$.

4) Now, consider a fourth table

x	3.9	3.99	4	4.001	4.1
$f(x)$	-2.05	-2.01		-0.99	-0.96

Predict the value of $f(x)$ when $x=4$.

NOTES

Practice - Find the following limits.

1) $\lim_{x \rightarrow 3} \frac{x^2 - 4x + 3}{x - 3}$

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

3) $\lim_{x \rightarrow 2} \frac{x^2 + 2x - 8}{x^2 - 2}$

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

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

6) $\lim_{x \rightarrow 0} \frac{\sin x}{x}$

7) $\lim_{x \rightarrow -3} \frac{x^2 + 5x + 6}{x + 3}$

Precalc – Exit Slip – 2/8/11

Name: _____

Period: _____

Find the following limits.

1) $\lim_{x \rightarrow 3} \frac{x^2 - 5x + 6}{x - 3}$

2) $\lim_{x \rightarrow 2} \frac{x^2 - 6x + 8}{x - 2}$

Precalc – Exit Slip – 2/8/11

Name: _____

Period: _____

Find the following limits.

1) $\lim_{x \rightarrow 3} \frac{x^2 - 5x + 6}{x - 3}$

2) $\lim_{x \rightarrow 2} \frac{x^2 - 6x + 8}{x - 2}$