

LIMIT REVIEW

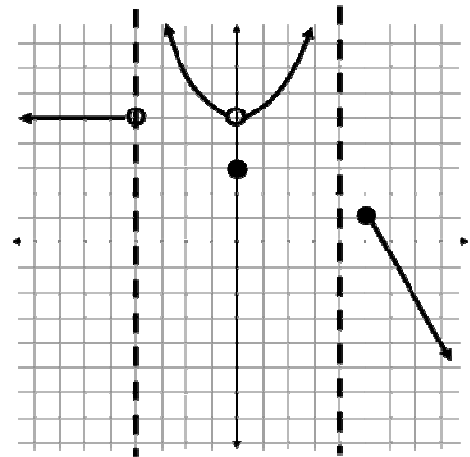
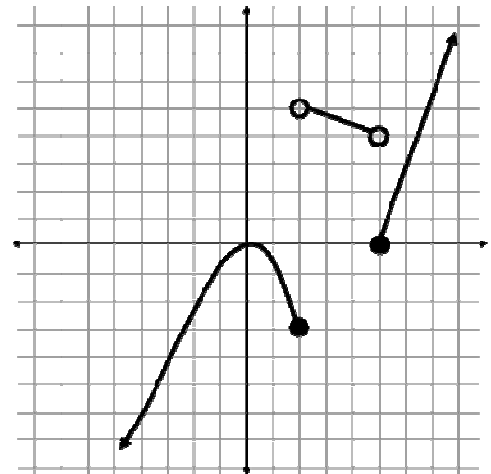
NAME \_\_\_\_\_

Calculus

Date \_\_\_\_\_ Per \_\_\_\_\_

For problems 1-16, determine the following limits.

1.  $\lim_{x \rightarrow 2} f(x) =$  \_\_\_\_\_
2.  $\lim_{x \rightarrow 5} f(x) =$  \_\_\_\_\_
3.  $\lim_{x \rightarrow \infty} f(x) =$  \_\_\_\_\_
4.  $\lim_{x \rightarrow -\infty} f(x) =$  \_\_\_\_\_
5.  $\lim_{x \rightarrow 5^+} f(x) =$  \_\_\_\_\_
6.  $f(2) =$  \_\_\_\_\_
7.  $f(5) =$  \_\_\_\_\_
8.  $\lim_{x \rightarrow 5^-} f(x) =$  \_\_\_\_\_
9.  $\lim_{x \rightarrow 2^+} f(x) =$  \_\_\_\_\_
10.  $\lim_{x \rightarrow 2^-} f(x) =$  \_\_\_\_\_
11.  $\lim_{x \rightarrow \infty} f(x) =$  \_\_\_\_\_
12.  $\lim_{x \rightarrow -\infty} f(x) =$  \_\_\_\_\_
13.  $\lim_{x \rightarrow 0} f(x) =$  \_\_\_\_\_
14.  $\lim_{x \rightarrow 4^+} f(x) =$  \_\_\_\_\_
15.  $\lim_{x \rightarrow 4^-} f(x) =$  \_\_\_\_\_
16.  $f(0) =$  \_\_\_\_\_



For the following problems calculate the following limits.

17.  $\lim_{x \rightarrow 3} \frac{x^3 - 27}{x - 3} =$
18.  $\lim_{x \rightarrow \infty} -3x^7 + 12x^4 + x - 2 =$
19.  $\lim_{x \rightarrow 7^+} \frac{x + 8}{x - 10} =$
20.  $\lim_{x \rightarrow 9} \frac{x^2 + 2}{x^2 - 81} =$
21.  $\lim_{x \rightarrow \infty} \frac{18x^{16} + 14x^{12}}{9x^{16} - 20x^2} =$
22.  $\lim_{x \rightarrow -2} \frac{x^2 - 4}{x + 2} =$
23.  $\lim_{x \rightarrow 5} 6x^2 - 10x + 4 =$
24.  $\lim_{x \rightarrow 5^+} \frac{x - 3}{x - 5} =$
25.  $\lim_{x \rightarrow \infty} \frac{5x^4 - 2x^2}{10x} =$
26.  $\lim_{x \rightarrow \infty} \frac{3x^2 - 8x + 5}{4x^3 + 16x^2} =$
27.  $\lim_{x \rightarrow -12} \frac{x + 12}{x - 12} =$
28.  $\lim_{x \rightarrow 3} \frac{x^4 - 81}{x^2 - 9} =$
29.  $\lim_{x \rightarrow -7^+} \frac{x + 1}{x^2 - 49} =$
30.  $\lim_{x \rightarrow -\infty} 5x^3 + 7x^6 - 2x + 1 =$