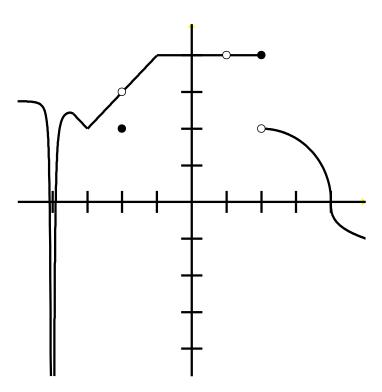

_ Quiz 3, Calculus 1

1) Find each of the following limits.

$$\lim_{x \to 3^+} \frac{x^2 - 5x + 6}{x^2 - 6x + 9}$$

$$\lim_{x \to \infty} \frac{x^3 + 3x + 2}{2x^3 + x^4}$$

2) For the function graphed below, identify each x-value at which the function is NOT continuous.



3) Find the value of \boldsymbol{a} so that the limit below equals 4.

$$\lim_{x \to -\infty} \frac{ax^2 + 3}{2x^2 + 4}$$