

name: _____

1 (6 points). Compute the following limits:

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

(b) $\lim_{x \rightarrow 3^-} \frac{2}{(x-3)^3}$

(c) $\lim_{x \rightarrow 3} \frac{2}{(x-3)^3}$

2 (6 points). Compute the following limits:

(a) $\lim_{x \rightarrow 1^+} \frac{x}{|x-1|}$

(b) $\lim_{x \rightarrow 1^-} \frac{x}{|x-1|}$

(c) $\lim_{x \rightarrow 1} \frac{x}{|x-1|}$

① a) ∞ b) $-\infty$ c) DNE b/c one sided limits are different.

② a) ∞ b) ∞ c) DNE b/c it's ∞ .