1. The function $f(x) = e^{\cos(x)}$ is continuous on the set of all real numbers. Evaluate the limit.

$\lim_{x \to 1} e^{\cos(x)} =$ $\quad e^{\cos(1)}$

2. The function $f(x) = e^{-1/x^2}$ is continuous on its domain. Note that $f(0)$ is undefined. Can we conclude that $\lim_{x \to 0} f(x)$ DNE? $\quad$ No.

3. Evaluate $\lim_{x \to 2} \dfrac{x^2 - 3x + 2}{x - 2}$, showing all the steps and using good grammar.

$$\lim_{x \to 2} \frac{x^2 - 3x + 2}{x - 2} = \lim_{x \to 2} \frac{(x-2)(x-1)}{(x-2)}$$

$\Big)$ The magic step.

$$= \lim_{x \to 2} (x-1)$$

$$= 2 - 1$$

$$= \boxed{1}$$

Notes $\qquad$ A = B

$\qquad\qquad\qquad$ = C

$\qquad\qquad\qquad\qquad$ = D

$\qquad\qquad\qquad\qquad\qquad$ = $\boxed{E}$

means $\underline{A = E}$, and

this is the final answer

Note: ~~what~~ $\lim_{x \to 2} \dfrac{x^2 - 3x + 2}{x - 2} = \dfrac{2^2 - 3 \cdot 2 + 2}{2 - 2} = \dfrac{0}{0}$

Don't do this! →

not true = sign.

Don't write " $\lim_{x \to 2} \dfrac{(x-2)(x-1)}{(x-2)}$ " which is it?

$\lim_{x \to 2} \dfrac{(x-2)(x-1)}{x-2}$ or $\lim_{x \to 2} (x-1)$.

write both expressions and realize that the function is different, like in the solution above.