Math 100. Quiz Sample (only to show the format of the quiz)  
2017-xx-xx (xx) Time 25min

Section ........ Instructor name ...........................................

Your email .................................................................

There will be a box here to put your first and last name and student number.

• For each computation of limits in this test, if the limit does not exist, indicate whether it diverges to $-\infty$ or $+\infty$.

• Simplify all your answers as much as possible and express answers in terms of fractions or constants such as $\frac{1}{100}$, $\sqrt{e}$ or $\ln(4)$ rather than decimals.
1. Each part of this question is worth 1 mark, and the correct answer will get the full mark.

(a) (1 pt) Compute

\[
\lim_{x \to ??} ??
\]

(b) (1 pt) Compute

\[
\lim_{x \to ??} ??
\]
2. Each part of this question is worth 2 marks. **You have to show all your work in order to get credit.**

(a) (2 pts) Compute

(b) (2 pts) Compute
3. This question is worth 4 marks. You have to show all your work in order to get credit.

Find ??????. 