No calculators will be allowed and no partial credit will be given.

1. Evaluate the limit \( \lim_{x \to -1} \frac{x^2 + 2x + 2}{x + 4} \). Express your answer in simplified form.

2. Evaluate the limit \( \lim_{x \to -1} \frac{5x + 2}{2 - 3x} \). Express your answer in simplified form.

3. Evaluate the limit \( \lim_{x \to 5} \frac{x^2 - 2x - 15}{x - 5} \). Express your answer in simplified form.

4. Evaluate the limit \( \lim_{h \to 0} \frac{(h + 5)^2 - 25}{h} \). Express your answer in simplified form.

5. Find the value of \( \lim_{x \to 3} \frac{x^2 - 9}{5x - 15} \). Express your answer in simplified form.

6. Find the value of \( \lim_{x \to 3^+} \left( \ln \left( x^2 - 9 \right) - \ln \left( 5x - 15 \right) \right) \). Express your answer in simplified form.

7. Find the value of \( \lim_{x \to 3} \left( e^{\frac{1}{(5x-15)}} \right)^{(x^2-9)} \). Express your answer in simplified form.

8. Evaluate the limit \( \lim_{t \to 25} \frac{25 - t}{5 - \sqrt{t}} \). Express your answer in simplified form.
1. \(\frac{1}{3}\)

2. \(-\frac{3}{5}\)

3. 8

4. 10

5. \(\frac{6}{5}\)

6. \(\ln(6/5)\)

7. \(e^{\frac{6}{5}}\)

8. 10