1. (3 points) Evaluate the following indefinite integral.

\[
\int (10 + 3 \tan^2 x) \, dx
\]

2. (3 points) Sal loves blueberries. At 9:00 AM, she started eating some at a rate of \( \frac{480}{t} \) blueberries per minute, where \( t \) denotes the number of minutes since 9:00 AM. What is the total number of blueberries that Sal ate between 10:00 AM and 11:00 AM? Simplify your answer as much as possible without the use of a calculator.
3. (2 points) Fill in the missing information to show that the given definite integral can be expressed as the limit of a Riemann sum. The only variables appearing in your limit should be \( n \) and \( k \). You do not need to evaluate this limit.

\[
\int_{-3}^{2} \frac{4}{7 + x^2} \, dx = \lim_{n \to \infty} \sum_{k=1}^{n} [\quad]
\]

4. (2 points) Suppose \( f \) is integrable on the interval \([1, 10]\). Given the following definite integrals, what is the value of \( \int_{3}^{6} f(x) \, dx \)?

\[
\int_{1}^{6} f(x) \, dx = 5 \\
\int_{1}^{10} f(x) \, dx = 17 \\
\int_{3}^{10} f(x) \, dx = 8
\]