Read each problem very carefully before starting to solve it. Each problem is worth 5 points. It is necessary to show all your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Subtract and simplify

$$
\frac{10 x+11}{2 x^{2}+5 x+2}-\frac{4}{2 x+1}
$$

2. Simplify the complex fraction

$$
\frac{a^{-2}-b^{-3}}{a^{-1} b^{-2}}
$$

3. Solve for $x$ the equation

$$
\frac{5}{x}-\frac{4}{x+2}=\frac{1}{5}+\frac{1}{5 x}
$$

