These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1. It appears that the Least Common Denominator is $x(x - 2)$.

\[
\frac{3}{x - 2} + \frac{5}{x} - \frac{6}{x^2 - 2x} = \left( \frac{3}{x - 2} \right) \left( \frac{x}{x} \right) + \left( \frac{5}{x} \right) \left( \frac{x - 2}{x - 2} \right) - \frac{6}{x(x - 2)} = \frac{3x + 5(x - 2) - 6}{x(x - 2)} = \frac{8x - 16}{x(x - 2)} = \frac{8(x - 2)}{x(x - 2)} = \frac{8}{x}
\]

2. We begin by translating the exponential parts to fractions:

\[
\frac{x - y^{-1}}{x^{-1} - y} = \left( \frac{x - \frac{1}{y}}{\frac{1}{x} - y} \right) = \left( \frac{xy - 1}{y} \right) \left( \frac{x}{1 - xy} \right) = - \left( \frac{xy - 1}{y} \right) \left( \frac{x}{xy - 1} \right) = - \frac{x}{y}
\]

Here’s another solution:

\[
\frac{x - y^{-1}}{x^{-1} - y} = \frac{xy}{xy} \left( \frac{x - y^{-1}}{x^{-1} - y} \right) = \frac{x^2y - x}{y - xy^2} = \frac{x(xy - 1)}{y(1 - xy)} = - \frac{x(1 - xy)}{y(1 - xy)} = - \frac{x}{y}
\]