(a) 1. Divide the following complex numbers, expressing your answer in $a + bi$ form.

\[
\frac{1 - 3i}{2 - i} \cdot \frac{(2+i)}{(2+i)} = \frac{2 + i - 6i + 3i^2}{4 + 2i - 2i - i^2} = \frac{2 - 3i}{5} = \frac{2}{5} - \frac{3}{5}i
\]

(b) 2. Perform the indicated operations on the polynomials below, expressing your answer as a single polynomial.

\[
(x + 2)(2x - 1) - (x + 1)^2 = (2x^2 + 3x - 2) - (x^2 + 2x + 1) = (2x^2 + 3x - x^2 + 3x + 2x - 2 - 2) = x^2 + x - 3
\]