1. Do these three integrals. The first has two distinct real roots, so factor it and use partial fractions. The second has a double root, so factor it and perform a u substitution. The third has no real roots, so complete the square.

$$\int \frac{dx}{x^2-4x+3} \qquad \int \frac{dx}{x^2-4x+4} \qquad \int \frac{dx}{x^2-4x+5}$$

2. Do these three integrals. Use the fact that $2x-3=(2x-4)+1$ and that $\frac{d}{dx}x^2-4x+5=2x-4$.

$$\int \frac{2x-3}{x^2-4x+3}dx \qquad \int \frac{2x-3}{x^2-4x+4}dx \qquad \int \frac{2x-3}{x^2-4x+5}dx$$