5

Due **Tuesday** Jan 30, at the start of the recitation.

It is **very** important that you clearly show what you are doing and that what you write makes sense and follows proper mathematical form. A correct answer poorly explained will not get full marks.

1. Evaluate 
$$\int \frac{7x^3 - 12x^2 - 6x + 19}{(x-2)(x+3)(x^2 - 4x + 5)} dx.$$

To evaluate one of the integrals in the partial fractions decomposition, you might want to complete the square and substitute for x-2.