

## Exercise Sheet 7

Hand in your work by 20 November.

Evaluate the following indefinite or definite integrals.

1. (Warm-up question\*)  $\int_0^{\frac{\pi}{3}} \cos x \sin^5 x \, dx$

2.  $\int \frac{x^2 + 3x + 5}{x^3 - x^2 + 2x - 2} \, dx$

3.  $\int \frac{x^2 + 8x + 12}{x^2 + 6x + 9} \, dx$

4.  $\int_{-1}^0 \arccos x \, dx$

5.  $\int \frac{1}{\sqrt{1 - 2x^2}} \, dx$

Solutions will be available after the hand-in date at:

<http://people.bath.ac.uk/rm257/MA10192/>

RM, 27/10/2017

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\*Do not hand in your work for this question.