

## Exercise Sheet 1

Hand in your work by 9 October.

Solve the following equations for  $x$  (finding **all** and **exact** solutions). **Hint:** you can always check your solutions by inserting them into the equation.

1. (Warm-up question\*)  $4x - 8 = 4$ .

2. (Warm-up question\*)  $5^x = 2$ .

3.  $x^2 - 3x - 4 = 0$ .

4.  $e^{2x}e^{2x} = 2$ .

5.  $(\ln x)^2 + 2 \ln x = 3$ .

6.  $\ln(x + 1) + \ln(x - 2) = 0$ .

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

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

RM, 12/09/2017

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