Williams College
Department of Mathematics and Statistics

MATH 140 : Calculus II

Problem Set 16 – due Tuesday, April 28th

INSTRUCTIONS: This assignment must be turned in by email on Tuesday at **9am** EDT (that's morning in Williamstown) by going to

https://bit.ly/2RRu2aV

You may submit photos or scans of your written work; please make sure your name appears on each page. (You can also try using the scratchwork app: https://app.scratchwork.io/ to write up your HW.) Be prepared to discuss these problems in your upcoming small group meeting.

16.0 Read the note on how to integrate rational functions (posted on the course website under the assignments section).

16.1 Evaluate $\displaystyle\int \frac{x}{x^2 + 3}\, dx$

16.2 Evaluate $\displaystyle\int \frac{1}{\sqrt{x}e^{\sqrt{x}}}\, dx$

16.3 Evaluate $\displaystyle\int \frac{x - 1}{\sqrt{3x^2 - 6x + 1}}\, dx$

16.4 Evaluate $\displaystyle\int \frac{6x - 5}{2x}\, dx$

16.5 Evaluate $\displaystyle\int \frac{6x - 5}{2x + 1}\, dx$