

**Quiz 3 — MA16020 — January 17, 2018**

Alden Bradford

1. (6 points) Find and simplify completely

$$\int_2^7 \frac{3x}{\sqrt{x+2}} dx.$$

2. (4 points) In class we found that a typical Yorkshire terrier has a weight of

$$Y(t) = \frac{2.1e^{(t-15)/10}}{e^{(t-15)/10} + 1}$$

kilograms, where  $t$  is in weeks since birth. Write (but DO NOT COMPUTE) an integral to compute the average weight of the terrier over its first 8 weeks.