# Quiz 3 Key — MA16020 — January 17, 2018
## Alden Bradford

| Min | Mean | Max |
|-----|------|-----|
| 1   | 7    | 10  |

1. (6 points) Find and simplify completely

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

| |
|---|
| 26 |

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.

| |
|---|
| $\dfrac{1}{8}\displaystyle\int_0^8 \dfrac{2.1e^{(t-15)/10}}{e^{(t-15)/10}+1}\, dt$ |