

Errata - Year 12 Mathematics B

Despite our best efforts, a few errors have weaselled their way into the Year 12 textbook.

Chapter Two

Exercise 2C page 47

- 1f. The variable in the answer should be t and not x .
2m. Since students have to expand the expression to solve this, the answer is better expressed as

$$\frac{4x^3}{3} + 10x^2 + 25x + c$$

Chapter Three

Exercise 3E

- 1p. answer is $(-2\sin x) / (3 \cos^2 x)$.

Exercise 3H

- Q1 (q) Answer is missing a $-$ sign.

Exercise 3I

- Q1 (f) Answer has the wrong variable.

Exercise 3M

- Q1h. The answer should be $3 \sin (u/3) + c$

Exercise 3P page 103

3. This question is the same (almost) as question 2.
4. The coordinates of point P are incorrect, they should be $\left(\frac{5p}{6}, -\frac{\sqrt{3}}{2}\right)$.
8. a. The question is misplaced, as it should be in the Chapter 2 problem set. There is a typo as well; the question should read, "What is $\int f(x) dx$?"
b. This question is also misplaced – it should be in the problem set for Chapter 8. Here is an alternative question along the same lines:

If $y = x \sin x$, find $\frac{dy}{dx}$.

Hence evaluate $\int_0^{\frac{p}{2}} x \cos x dx$

Chapter Four

Exercise 4F

4d. The answer is 1.

Exercise 4G page 136

2e. The phrase “The players decide to change **to** rules.” should read “The players decide to change **the** rules.”

The phrase “...player B wins \$5.” should read “... player A wins \$5.”

Exercise 4I page 143

3. Oh dear, a *really* fundamental error. The equation of a sphere of radius r is given by $x^2 + y^2 + z^2 = r^2$.

4a. The first die should be labelled A.

Chapter Five

Exercise 5C

Q 1g answer should be 1.387

Q 2a 0.738

Q 2b answer should be -0.326

Q 3 3

Page 179 $\log E = 4.8 + 1.5 M$

A clarification is needed here. This is only the seismic energy associated with the earthquake and not the total energy. The total energy would be many, many times greater. The total energy can be predicted from the seismic energy.

Chapter Seven

Example 7.5 page 209

The phrase “The amount of the investment after **1998** years ...” should read “The amount of the investment after **2002** years ...”. The answer is still correct, thank goodness.

Exercise 7B

Q6c, Q6d. The Amount and not the Interest is given.

Exercise 7M

Q1. “...Yanna will pay of fall these debts...” should be “...Yanna will pay off all these debts...”

Chapter Eight

Exercise 8E

page 443 Q4 b. “...remaining after 0 minutes...” should be “...remaining after 10 minutes...”
The answer is correct.