



**THE SCHOOL FOR EXCELLENCE (TSFX)
VCE PHYSICS UNIT 3 & 4
WRITTEN EXAMINATION 2020 – ERRATA**

SECTION B: SHORT ANSWER QUESTIONS

QUESTION 10b

Calculate the impulse exerted on the carriage **by the locomotive**.

SOLUTIONS – SECTION B

QUESTION 11b – Line 4

$$t = \frac{d}{v} = \frac{100}{42\cos 27} = 2.67 \text{ s}$$

QUESTION 12b – Line 2

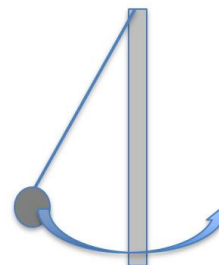
The 0.97 should be squared.

QUESTION 14b – Line 2

$$T\cos 30^\circ = 2.2 \times 9.8$$

QUESTION 14b

The correct answer for the given diagram is 43 N.
The answer in the solutions (25 N) relates to the following diagram:



QUESTION 15a – Table

Please change “Fixed Variable” in Cell 1 to “Controlled Variable”.