

Errata for the Sixth Printing of *Exploring Creation With Physics, 2nd Edition*

With the help of students and teachers, we have found a few typos in the sixth printing of the second edition. These are listed in the errata sheet for the previous printings as well.

Student Text

Module #5:

CD ONLY In the section entitled “An Equation for the Frictional Force,” The bold-faced sentence should have a closed parenthesis after μ s.

Module #6:

CD ONLY In the section entitled “Translational Motion and Measuring Weight 2,” “32 m/sec²” should be replaced by “32 ft/sec²”

Module #9:

CD ONLY “equation (9.7)” should be replaced with “Equation (9.7).”

In the section entitled “Angular Momentum, the units for angular momentum should be $\frac{\text{kg} \cdot \text{m}^2}{\text{sec}}$, not $\frac{\text{kg} \cdot \text{m}}{\text{sec}}$

Module #10:

p. 320 In Equation 10.1, the F should be bold, **F**.

p. 322 On the first line under equatoin 10.3, the F should be bold, **F**.

Last paragraph on this page, fourth line up, should say “force equal to but opposite the weight of the object...”

Module 16:

p. 542 The definition of direct current should say “flows” not “flow”.

p. 546 The last seven words of #15 should say “magnet is the same in each case”.

Appendix A:

p. 558 In Hooke’s Law, the F should be bold, **F**.

Extra Practice Problems for Module #9:

p. 573 Question #6 should ask for the velocity, not the speed.

p. 573 Question #8 should ask for the speed, not the velocity.

Solutions and Tests Manual

Solutions to the Practice Problems for Module #6:

p. 54 For question #9, here is a better way of calculating the acceleration. This keeps consistent with our use of significant figures.

$$f + -w \cdot \sin(\theta) = ma$$

$$95 \text{ Newtons} + -(290 \text{ Newtons}) \cdot \sin(23^\circ) = (30.1 \text{ kg}) \cdot a$$

$$95 \text{ Newtons} + -110 \text{ Newtons} = (30.1 \text{ kg}) \cdot a$$

$$a = -20 \text{ Newtons} / 30.1 \text{ kg} = -0.7 \text{ m/sec}^2$$

Solutions to the Practice Problems for Module #7:

p. 61 The answer to question #10, should say 2.24 hours instead of 2.2 hours.

Solutions to the Practice Problems for Module #8:

p. 64 The value inside the square root should be 350 instead of 340 for question 3.

p. 65 The value inside the square root should be 290 instead of 292 for question 4.

Solutions to the Practice Problems for Module #9:

p. 72 The last equation for #6 should have a positive 18 in the numerator. This does not affect the final answer.

Solutions to the Extra Practice Problems for Module #6:

p. 128 The second equation in the problem should read:

$$T_{2y} = (10.3 \text{ lbs}) \cdot \sin(105^\circ) = 9.95 \text{ lbs}$$

This does affect the weight calculation to make 19.9 lbs. This does not affect the solution. However, the angle must be defined properly, which makes it 105° rather than 75° . This is where the third significant figure comes from.

Solutions to the Extra Practice Problems for Module #9:

- p. 145** In problem #7, the numerator for v_{both} should be 1.15×10^5 , which changes the answer to 83.2 m/sec.

Solutions to the Test for Module #8:

- p. 238** The final answer for #10 should be 5.3 m/sec.

Solutions to Quarterly Test #4:

- p. 297** Problem #5: The answer should read, “The greatest acceleration will occur where the force is the greatest. In an electric field, this occurs where the line density is the greatest, directly next to A or B.”
- p. 301** Problem #19: the third set of parallel resistors should have a resistance of 9.90 Ω , which makes the total resistance 23.4 Ω , which makes the current 5.13 A, which makes the power 6.16 Watts.