PHYSICS 11 ANSWERS AND SOLUTIONS

INTRODUCTION TO PHYSICS

Lesson 2 – Significant Digits and Scientific Notation

1. a) 3 **b)** 2

c) 3 **d)** 1

e) 3

2. a) 3.40×10^{-3} m **b)** 7.0×10^{2} m

c) 5.6×10^{2} m **d)** 5.5×10^{2} m

e) 4.1×10^{2} m

3. a) 72.3 m **b)** 559 m

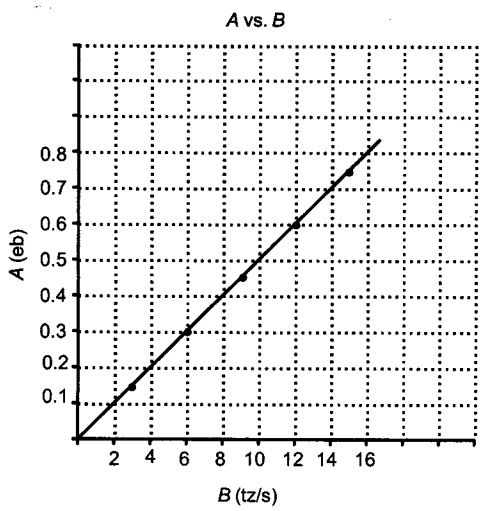
c) 490 m or 4.90×10^{2} m

4. a) 62 m **b)** 18 m

c) 1.24×10^{4} m

Lesson 3–Graphing

1.



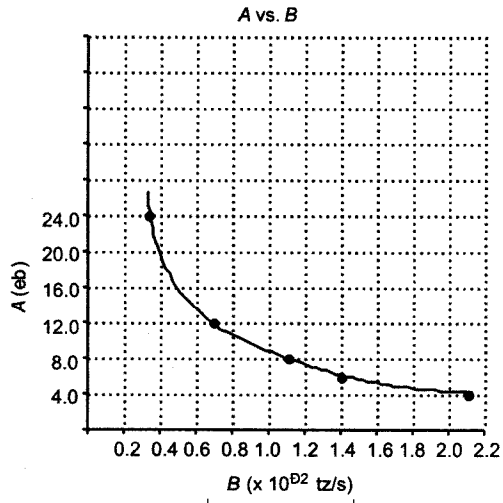
b) $\text{slope} = \dfrac{\text{rise}}{\text{run}} = \dfrac{y_2 - y_1}{x_2 - x_1}$

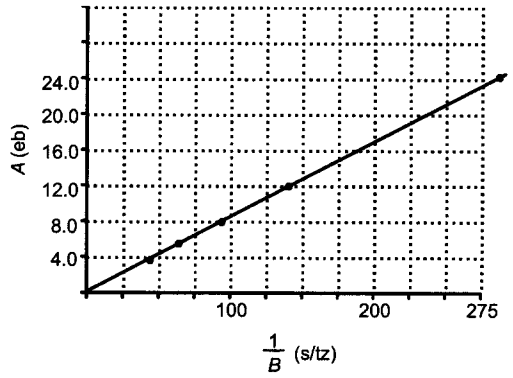
$= \dfrac{0.750 \text{ eb} - 0}{15.0 \text{ tz/s} - 0}$

$= 5.00 \times 10^{-2}$ eb•s/tz

c) $A \Delta B$ or $A = kB$

2. a)



b)

B ($\times 10^{-2}$ tz/s)	A (eb)	$\frac{1}{B}$ (s/tz)
2.1	4.0	47.6
1.4	6.0	71.4
1.1	8.0	90.9
0.7	12.0	143
0.35	24.0	286