Topic 01. Introduction to Physics

ANSWERS

1. $31,536,000\,s$ (for estimations $3 \times 10^7\,s$)

2. 31.7 y

3. $6.71 \times 10^8\,\frac{\text{mi}}{\text{h}}$

4. (a) 1480 m, (b) 1.85 cm

5. 1.7 tanks

6. $9.2\,\frac{\text{nm}}{\text{s}}$

7. $\sim 10^7$ revolutions

8. 0.45 %

9. (a) 2.2 m, (b) $(2.2\,\text{m}, 27°)$

10. (a) $0.677\,\frac{\text{g}}{\text{cm}^3}$, (b) $4.63 \times 10^{17}\,\text{ft}^2$

11. $10^{10} \div 10^{11}$ y

12. 385 m, 25° south-west