

Kinematic Textbook Review

Page 82 # 1, 2, 8, 10-12, 14, 16-19, 25a, 27, 28, 30,31

1.) $+8.0 \frac{m}{s^2}$

2a.) $+247 \frac{m}{s^2}$ which is $25 \times$ the acceleration due to gravity b.) $-207 \frac{m}{s^2}$ which is $21 \times$ gravity

8a.) $607 \frac{m}{s}$ b.) $1.83 \times$

10.) $924 m$

11.) $1650 m$

12a.) $43.2 m$ b.) displacement = $43.2 m$ and distance = $46.8 m$

14.) $1.22 s$

16.) $+70.7 \frac{m}{s}$

17a.) $137.5 m$ b.) $550 m$

18a.) $24.4 s$ b.) $744 m$

25a.) Yes!! ($50 m$) b.) $21.75 \frac{m}{s}$ or $78.3 \frac{km}{h}$

27a.) $+5.0 \frac{m}{s}$ b.) $+1.67 \frac{m}{s^2}$ c.) $7.5 m$

28a.) $147 m$ b.) $42 \frac{m}{s}$

30a.) $-78.4 \frac{m}{s}$ b.) $-314 m$

31.) $-15.3 \frac{m}{s}$