

運動

Sec.1

1. 65s
2. 24m

Sec.2

1. 4m/s^2
2. (a) . (c)
3. 1 : 3
4. 2.4km/h
5. 勝利屬於始終堅持到底的人
6. (a)No
(b)8
(c)2
(d) 6m/s

Sec.3

1. 100m/s
2. $\sqrt{\frac{a^2+b^2}{2}}$
3. 25m/s
4. (a) 72km/h
(b) 7s
(c) $\frac{10}{7} \text{ m/s}^2$

Sec.4

1. 280m , 7s
2. (a) 3s , 15m
(b) 1:1 , 0.5s , $D_{\text{水平}} = 2.5\text{m}$ 、 $D_{\text{垂直}} = 1.25\text{m}$
(c) 1:2 , 1s , $V_{\text{水平}} = 5\text{m/s}$ 、 $V_{\text{垂直}} = 10\text{m/s}$

Sec.5

1. (a) 10s

(b) $D_{\text{水平}} = 240\text{m}$ 、 $D_{\text{垂直}} = 320\text{m}$

2. (a) $\sqrt{0.6}$ s

(b) 10

(c) $5\sqrt{0.6}\text{m}$

3. (a) 1.4s

(b) $D_{\text{水平}} = 16.8\text{m}$ 、 $D_{\text{垂直}} = 12.6\text{m}$

Sec.6

1. 20m/s 、 80 m/s^2

2. B

3. A.C.E.F.G

4. 15 m/s^2

5. $0.25\pi\text{ m}^2$

6. (a) 5 rad/s

(b) $50\pi\text{ m/s}^2$

(c) 6 m/s^2

7. 53°

8. (a) $30\sqrt{2}\text{m/s}$

(b) 150m

9. (a) 400s

(b) 200s

Sec.7

1. $a_{\text{max}} = 2.5\pi^2\text{ m/s}^2$ $V_8 = \pm 3\pi\text{ m/s}$ $a_8 = -2\pi^2\text{ m/s}^2$ $V_6 = \pm 4\pi\text{ m/s}$ $a_6 = 1.5\pi^2\text{ m/s}^2$

2. (a) 0.5s

(b) $40\pi\text{ m/s}$

(c) $160\pi^2\text{ m/s}^2$

3. 4s

Sec. 8

1. 慢 8640 秒

2. (e)

Sec.9

1. 可 , 1s , 不可
2. $A = 50\text{m/s}$ 向右 , $B = 25\sqrt{2}\text{m/s}$ 向右偏上方 45 度 , $C = 25\text{m/s}$ 向右偏下方 60 度