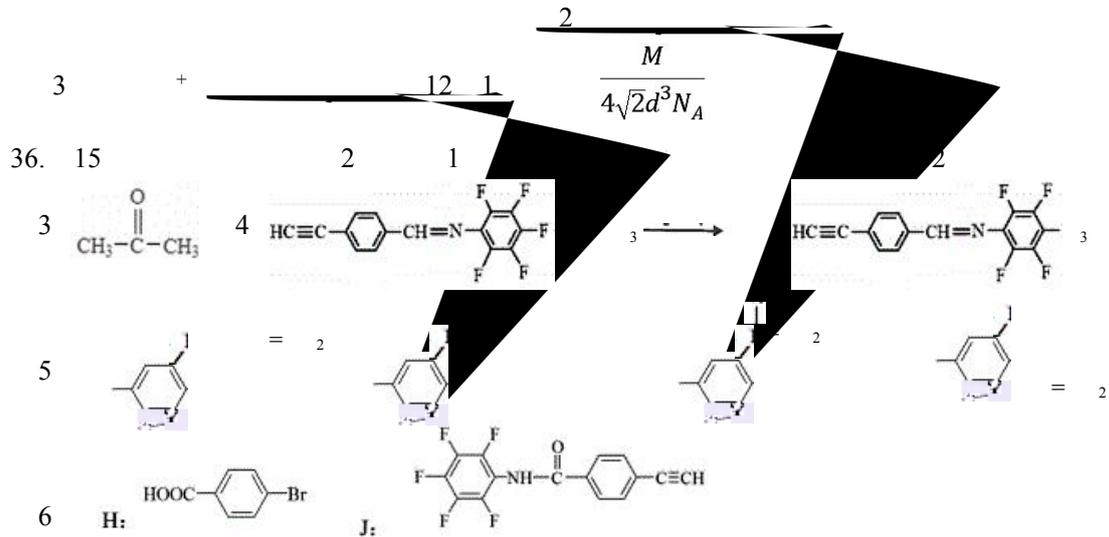


27. 14 2 1
 $2 \text{ } (2 \text{ } 4)^2 \text{ }^2 \text{ } 4 \text{ } 2 = (2 \text{ } 4)^2 \text{ } 4 \text{ } 2 \text{ } (\text{ })$
 $3 \text{ } 4 \text{ } (2 \text{ } 4)^2 \text{ } 4 \text{ } 2 \text{ } \frac{\text{室温}}{\text{隔绝空气}} \text{ } 3 \text{ } 2 \text{ } 2 \text{ } 2 \text{ } 4 \text{ } 2$
 $4 \text{ } 1.0 \text{ } 10^{-10} \text{ } (\text{ }^1)^2 \text{ } 510$

28. 15 2 1 2 412(-)
 $3 \text{ } 1 \text{ } <$

4 1 0.03 2 $4+2$ 3-2 2 $2 \text{ } 5+2 \text{ } +$
 35. 15 2 1



22 6 (1) 1.0500 2 (2) $(\frac{d}{t})^2 \text{ } 2$

(3) $m \text{ } 1 \text{ } mg \text{ } m \frac{d^2}{l \text{ } t^2} \text{ } 1$

23 9 (1) 18000 1 1 (2) 2

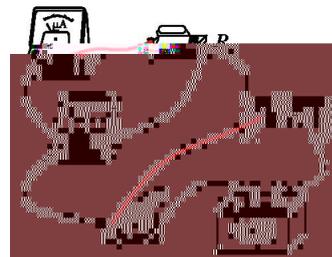
(3) 4.80 2 1 (4) 1500 2

(1) 1 2

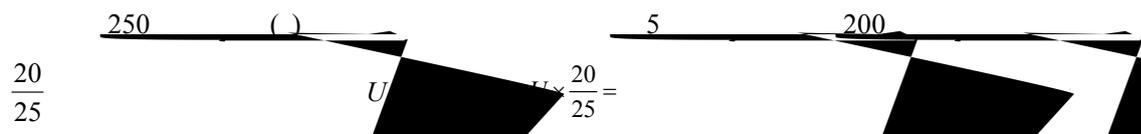
$U_V = I_g (R + R_g)$

$R = \frac{U_V}{I_g} - R_g = (\frac{5}{250 \times 10^{-6}} -$

(2) 3

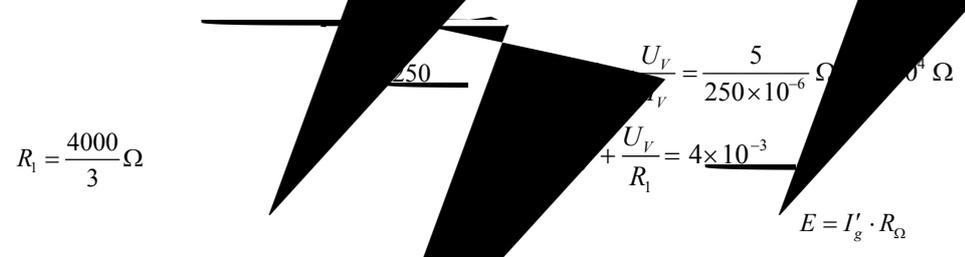


(3) 4



5

(4) 6



$$R_1 = \frac{4000}{3} \Omega$$

$$R_\Omega = \frac{E}{I'_g} = \frac{6}{4 \times 10^{-3}} \Omega = 1500 \Omega$$

24 12

(1)

$$f = qvB \quad 2$$

$$v = \omega r \quad 1$$

$$r = l \theta \quad 1$$

$$F \theta f = m r \omega^2 \quad 2$$

$$F = qB\omega l + m l \omega^2 \quad 2$$

(2)

$$N = F' \theta \quad 1$$

$$f = F' \theta \quad 1$$

$$\mu \geq \frac{f}{N} \quad 1$$

$$\mu \geq \theta \quad 1$$

25 20

(1)

$$MM'$$

$$mg \theta BIL = 0 \quad 2$$

$$I = \frac{BLv}{2r} \quad 2$$

$$v = \frac{2mgr \theta}{B^2 L^2} \quad 2$$

(2)

$$mv_m = 2mv \quad 2$$

$$Q = \frac{1}{2} m v_m^2 - \frac{1}{2} 2mv^2 \quad 2$$

NN'

$$Q = \frac{1}{2} Q \quad 1$$

$$Q = \frac{m^3 g^2 r^2}{2B^4 L^4} \theta \quad 2$$

3 NN' $B\bar{I}L\Delta t = n\Delta v$ $\Delta v = \frac{1}{2}v_m$ 2

$$\bar{I} = \frac{\bar{E}}{2r} = \frac{\Delta\Phi}{\Delta t} \quad 2$$

$\Delta\Phi = \frac{BLx}{\Delta t}$ x M' NN' 2

$$x \frac{4m^2 g^2 r^2}{B^4 L^4} \theta$$

NN' $x \frac{4m^2 g r^2}{B^4 L^4} \theta$ 1

33 1 5
(2)

$p_0 = 1.0 \cdot 10^5$ $V_0 = L_0 S$

p_1 $V_1 = L_1 S$ 1

$p_0 V_0 = p_1 V_1$ 2

$p_1 = 1.2 \cdot 10^5$ 1

$p_1 = p_0 + \rho g h_2$ 1

$\rho = 5.0 \cdot 10^3 \text{ kg/m}^3$ 1

() $V_2 = L_0 S$

$p_2 = p_0 + \rho g h_1 = 1.25 \cdot 10^5$ 1

$$\frac{p_1 V_1}{T_1} = \frac{p_2 V_2}{T_2} \quad 2$$

$T_2 = 350$ 1

34 1 37 $\frac{8 + \sqrt{14}}{6} R$

2 $y = 0.2 \left(\frac{\pi}{2} + 2\pi t \right)$

$\lambda = 24m$ $= 2\pi /$

