

BİRİNCİ DENEME SORULARININ CEVAPLARI

26/OCAK-7/ŞUBAT 2009 ITAP OLİMPİYAT OKULU

1. $\theta=45^\circ$

2. $\ell = \frac{(c+v)^2 t}{2c}$

3. R noktasında

4. $\frac{t_1}{t_2} = \sqrt{3}$

5. $x=4800$ m; $t=72$ s

6. $\frac{x_1}{x_2} = \frac{4}{5}$

7. $\omega = \frac{\theta + \beta}{\ell \beta}$

8. $f=2-\sqrt{3}$

9. $a_1 = \frac{g}{5}$

10. $\frac{N_k}{N_L} = \frac{3}{4}$

11. $m_1=3$ kg

12. $F_1-F_2=300$ N

13. $\frac{K_1}{A_1} = \frac{1}{9}$; $\frac{A_1}{A_2} = \frac{9}{7}$

14. $x_1 = \frac{2n\ell}{n+1}$

21. $\frac{P'}{P} = \frac{12}{5}$

22. $\frac{E}{E_0} = \sqrt[3]{2}$; $\frac{\varphi}{\varphi_0} = \sqrt[3]{4}$

23. $k=60$ N/m

24. $U = \frac{I_1 R}{8}$

25. $P_1' = \frac{P_1 P_2^2}{(P_1 + P_2)^2}$

26. $\frac{I_1}{I_2} = \frac{2}{3}$

27. $L = \frac{8\ell}{5}$

28. $f=120$ cm

29. $h = \frac{3x}{2}$

30. $x=4f$

15. $\frac{m_1}{m_2} = 1$

16. $= \frac{mg \sin \theta}{1 + \cos \theta}$; $N = mg$

17. $T = 2\pi \sqrt{\frac{\ell}{\sqrt{\omega^4 r^2 + g^2}}}$

18. $d = 6 \text{ gr/cm}^3$

19. $P = \frac{2ghd_1d_2}{d_1 + d_2}$

20. $\frac{\Delta m}{m} = \frac{1}{2}$