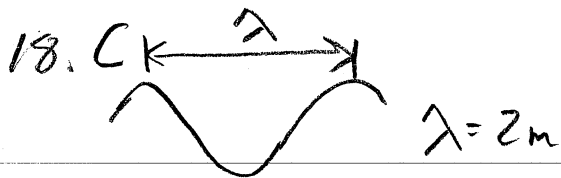


Chapter 13

1. A (Waves transfer energy; the water particles simply move up and down in place)

2. A 3. C 4. A 5. C 7. B 8. A

9. B 10. C 12. B 13. A 15. B



20. 2



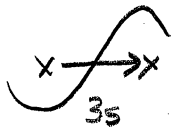
21. C 23. D 24. A

25. A $T = 2\text{s}$

$$\lambda = 3\text{m}$$

$$v = f\lambda = \frac{\lambda}{T} = \frac{3}{2} = 1.5\text{ m/s}$$

26. C



$$v = f\lambda$$

$$T = 2(3) = 6\text{ s}$$

$$\lambda = \frac{v}{f} = T v = 6(5) = 30\text{ m}$$

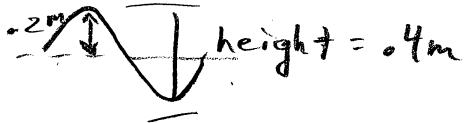
$$v = 5\text{ m/s}$$

28. A 29. B 30. B 31. B

32. C 33. B (assuming wave height is measured from trough to crest)

34. C $T = \frac{1}{f} = \frac{1}{.5} = 2s$ 35. A 37. A 38. A

39. C 40. D 41. C 43. A 44. B

46. A 49. C 50. A 

51. A 52. C 53. D 2m in 2 cycles
 $\frac{2}{2} = 1m/cycle = \lambda$

56. A 57. D 58. B 61. D

63. A 64. A 66. D 70. C 72. C