

5) $5\sqrt{6}$

8) $60\sqrt{15}$

9) $\frac{\sqrt{5}}{4}$

13) $\frac{3\sqrt{22}}{11}$

15) $-\sqrt{3}-1$

17) $\frac{4\sqrt{2}-\sqrt{10}}{11}$

27) $\pm\sqrt{11}$

28) $\pm\sqrt{5}$

30) $\pm 2\sqrt{35}$

31) $1\pm\sqrt{2}$

32) 2, 6

33) $\frac{-2\pm\sqrt{26}}{2}$

38) $h = -16t^2 + 40, 1.6 \text{ sec}$

39) Earth: 3.1 sec

Mars: 5 sec

Jupiter: 2 sec

Saturn: 3.2 sec

Pluto: 12.2 sec

40) The wind speed required to generate a 20 ft. wave is twice as fast as the wind needed to generate a 5 ft. wave.