## Solutions to HW2, Chapter 1

NOTE! The problems in masteringphysics.com had their numbers altered slightly for each individual student. The solutions below use the same numbers as those used in the book for that problem!
1.10. Solve:
(a)

(b)

1.11. Solve:

(b)

1.28. Solve: (a) $33.3 \times 25.4=846$ (b) $33.3-25.4=7.9$ (c) $\sqrt{33.3}=5.77$ (d) $333.3 \div 25.4=13.1$
1.56. Solve: $9.0 \mathrm{~g} / \mathrm{L}=\left(9.0 \frac{\mathrm{~g}}{\mathrm{~L}}\right)\left(\frac{1 \mathrm{~kg}}{1000 \mathrm{~g}}\right)\left(\frac{1 \mathrm{~L}}{1000 \mathrm{~mL}}\right)\left(\frac{1 \mathrm{~mL}}{1 \mathrm{~cm}^{3}}\right)\left(\frac{100 \mathrm{~cm}}{1 \mathrm{~m}}\right)^{3}=9.0 \mathrm{~kg} / \mathrm{m}^{3}$
1.12. Model: Model the skater as a particle.

Visualize: The dots are getting farther apart at the beginning, but after the skater reaches constant speed the dots are equally spaced.
Solve:


