HW Chap 1

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| 5. | | | | | *Soccer fields vary in size. A large soccer field is 115 m long and 85 m wide. What are its dimensions in feet and inches? (Assume that 1 meter equals 3.281 feet.)* |
| Solution | | | | |  |
| 8. | | | | | *The speed of sound is measured to be  on a certain day. What is this in km/h?* | | |
| Solution | | | | |  | | |
| 11. | | | | *Suppose that your bathroom scale reads your mass as 65 kg with a  uncertainty. What is the uncertainty in your mass (in kilograms)?* | | | |
| Solution | | | |  | | | |
| 20. | | | *(a) A person’s blood pressure is measured to be . What is its percent uncertainty? (b) Assuming the same percent uncertainty, what is the uncertainty in a blood pressure measurement of ?* | | | | |
| Solution | | | (a)  (b) | | | | |
| 29. | | *How many heartbeats are there in a lifetime?* ***\*note: your answer may be different depending on your assumptions. As long as you have reasonable assumptions and do the units conversions correctly, you get credit.*** | | | | | |
| Solution | |  | | | | | |