Math 118 - Dr. Miller - Homework #2: Measurement Conversion

- 1. Fill in each blank with the correct number; do not round:
 - (a) $0.456 \ dm = \underline{\hspace{1cm}} dam$

 - (c) $1.23 \ d\ell = \underline{\qquad} m\ell$
 - (d) $0.456 \ h\ell = \underline{\hspace{1cm}} k\ell$
 - (e) $78.9 \ c\ell = \underline{\qquad} \ell$
 - (f) $1.23 \ kg = \underline{\qquad} \ dag$
 - (g) $0.456 \ cg = \underline{\qquad} mg$
 - (h) $78.9 \ dg = \underline{\hspace{1cm}} hg$
 - (i) $9.5 m^2 \text{ to } cm^2$
 - (j) $3000 \ m^2 \ \text{to} \ km^2$
 - (k) $1500 \ cm^2 \ to \ dm^2$
 - (1) $73.8 \ cm^3 \ to \ mm^3$
- 2. Convert as indicated; round to the nearest tenth unless otherwise specified.
 - (a) 14.6 days to hours
 - (b) 14.6 hours to days (round to the nearest thousandth)
 - (c) $12\frac{1}{2}$ feet to inches
 - (d) $6\frac{3}{4}$ pounds to ounces
 - (e) 75,000 pounds to tons
 - (f) $4\frac{1}{2}$ tons to pounds
 - (g) $3\frac{1}{2}$ gallons to quarts
 - (h) $12\frac{1}{2}$ quarts to gallons (round to the nearest thousandth)
 - (i) 200 square feet to square yards
 - (j) 350 square feet to square inches
- 3. Convert the following "mixed" measurements as indicated; round to the nearest hundredth if needed.
 - (a) 5 feet, 7 inches to feet
 - (b) 5 feet, 7 inches to inches
 - (c) 8 pounds, 5 ounces to ounces
 - (d) 8 pounds, 5 ounces to pounds
 - (e) 7 hours, 14 minutes to minutes
 - (f) 7 hours, 14 minutes to hours

Math 118 - Dr. Miller - Solutions to HW #2: Measurement Conversion

- 1. (a) 0.00456 dam
 - (b) 789,000 cm
 - (c) $123 \text{ m}\ell$
 - (d) $0.0456 \text{ k}\ell$
 - (e) 0.789ℓ
 - (f) 123 dag
 - (g) 4.56 mg
 - (h) 0.0789 hg
 - (i) $95,000 \ cm^2$
 - (j) $0.003 \ km^2$
 - (k) $15 \ dm^2$
 - (1) $73,800 \ mm^3$
- 2. (a) 350.4 hours
 - (b) 0.608 days
 - (c) 150 inches
 - (d) 108 ounces
 - (e) 37.5 tons
 - (f) 9,000 pounds
 - (g) 14 quarts
 - (h) 3.125 gallons
 - (i) $22.2 \ yd^2$
 - (j) $50,400 in^2$
- 3. (a) 5.58 feet
 - (b) 67 inches
 - (c) 133 ounces
 - (d) 8.31 pounds
 - (e) 434 minutes
 - (f) 7.23 hours