

EXS 201 Statistical Applications in Exercise Science
Math Review Problems

J. Hendrick

1. Round the following numbers to two (2) decimal places.

- a. 24.587 = _____
- b. 163.4906 = _____
- c. 1.995 = _____
- d. 567.8957 = _____
- e. -0.1732 = _____
- f. .005 = _____
- g. -262.0149 = _____
- h. .00089 = _____

2. Complete the following calculations paying close attention to the proper order of operations within each problem.

Convert to 2 decimal places

- a. $6 \times 10 + 3 \times 2$ = _____ = _____
- b. $(9 + 31) \div 5$ = _____ = _____
- c. $(6)(-3) + (1)(4)$ = _____ = _____
- d. $(-6 - 7)(-4)$ = _____ = _____
- e. $(3 + 6 + 9)/7$ = _____ = _____
- f. $(7 - 13)/(2 + 5)$ = _____ = _____
- g. $(-5 + 3)/(3 - 13)$ = _____ = _____
- h. $14^2 + 3/7$ = _____ = _____
- i. $(17 - 8)^2$ = _____ = _____
- j. $\sqrt{(4/5) + 2}$ = _____ = _____
- k. $\sqrt{1 - .4^2}$ = _____ = _____
- l. $\frac{\sqrt{102 - 23^2/60}}{\sqrt{60-1}}$ = _____ = _____
- m. $\frac{17^2 - 1}{[6(25) - 1][6-1]}$ = _____ = _____

3. Convert the following values to the units requested. Use the conversions below and/or consult your favorite reference (many of these you should be familiar with anyway). Show all your work and round your final answer to 2 decimal places. Circle your final answer to each.

$$1 \text{ kg} = 2.2 \text{ lbs} \quad 1 \text{ in} = 2.54 \text{ cm} \quad 1 \text{ hour} = 3600 \text{ sec} \quad 1 \text{ m} = 100 \text{ cm} \quad 1 \text{ mi} = 5280 \text{ ft}$$

a. $43 \text{ in.} = ? \text{ ft}$

b. $14 \text{ m} = ? \text{ ft}$

c. $8 \text{ min } 38 \text{ sec} = ? \text{ min}$

d. $8 \text{ min } 38 \text{ sec} = ? \text{ sec}$

e. $100 \text{ yards} = ? \text{ m}$

f. $6 \text{ ft } 11 \text{ in} = ? \text{ in}$

g. $800 \text{ m} = ? \text{ mi}$

h. $62 \text{ kg} = ? \text{ lbs}$

i. $184 \text{ lbs} = ? \text{ kg}$

j. $30 \text{ mph} = ? \text{ ft/sec}$
(hint: first convert the miles to ft, then the hours to seconds)