Mathematics 1201
Assignment #1
Sections 1.1 – 1.3

Multiple Choice: Place the correct answer to each of the following in the blank at the right.

____ 1. Which referent could you use for 1 m?
   a. The width of a computer keyboard
   b. The length of a dinner fork
   c. The length of your stride
   d. The width of a classroom in your school

____ 2. Which referent could you use for 1 cm?
   a. The depth of a kitchen sink
   b. The length of a public swimming pool
   c. The width of your shortest finger
   d. The length of a walking stick

____ 3. Which referent could you use for 1 km?
   a. The distance equal to $2\frac{1}{2}$ laps on an oval running track
   b. The length of an iPod
   c. The length of a snowboard
   d. The length of your arm span

____ 4. Which referent could you use for 1 mm?
   a. The width of the head of an ant
   b. The diameter of a beach ball
   c. The distance between British Columbia and Manitoba
   d. The length of a sheet of loose-leaf paper

____ 5. Which referent could you use for 1 yd.?
   a. The width of your shortest finger
   b. The length of a screwdriver
   c. The height of the kitchen counter above the floor
   d. The length of a football field

____ 6. Which referent could you use for 1 in.?
   a. The distance from where you are now to the nearest restaurant
   b. The diameter of a bicycle wheel
   c. The length of your calculator
   d. The width of your largest toe

____ 7. Which referent could you use for 1 mi.?
   a. The length of a salmon
   b. The height of a grizzly bear standing on its hind legs
   c. The distance equal to 4 laps on an oval running track
   d. The thickness of a sheet of loose-leaf paper

_____ 8. Which referent could you use for 1 ft.?
   a. The distance between Regina and Whitehorse
   b. The diameter of a basketball
   c. The height of your math teacher
   d. The height of an ice hockey net

_____ 9. Which SI unit is most appropriate for measuring the length of a soccer field?
   a. Metres   b. Millimetres   c. Kilometres   d. Centimetres

_____ 10. Which SI unit is most appropriate for measuring the width of your desk?
   a. Kilometres   b. Centimetres   c. Metres   d. Millimetres

_____ 11. Which imperial unit is most appropriate for measuring the length of a ladder?
   a. Feet   b. Yards   c. Miles   d. Inches

Show your workings for each of the following

12. Convert each of the following.

 A) 28 miles to kilometres   B) 24 yards to feet

 C) 100 inches to yards, feet, and inches   D) 6 feet 5 inches to inches

 E) 5 yards 6 inches to inches   F) 112 inches to feet and inches

 F) 20 000 feet   to miles, yards, and feet.

13. A penalty box on a soccer field measures 44 yd. by 18 yd. What are these dimensions to the nearest tenth of a metre?

14. A thin strip of wood laminate is to be glued to the edges of a table. The length of laminate required is equal to the perimeter of the table, which has dimensions 175 cm by 110 cm. The laminate is sold in 8-ft. lengths. How much laminate must be purchased?

15. Marie has 17 yd. of material that she will cut into strips 19 in. wide. How many strips can Marie make?

16. Paul plans to replace 487 in. of wood railing along the top of his patio fence. The wood is sold in 8-ft. lengths. How many 8-ft. lengths does Paul need to purchase?

17. A hot air balloon is hovering at an altitude of 85 ft. Convert this altitude to the nearest metre.

18. A cruise ship is 790 ft. long. Convert this length to the nearest metre.

19. A killer whale is 8.5 m long. Convert this length to feet and the nearest inch.

20. What referents would you use to estimate the length, in both SI units and imperial units, of the distance between Tim Horton's and the Main Dock in Goose Bay? Explain how you could measure the length in both units.

21. A hardware store sells nylon rope for $0.89/yd. A lumber yard sells the same rope for $0.94/m.
    a) Which store sells the rope for a lower price? Show how you got your answer.
    b) How much money would Jim save if he purchased 550 ft. of the less expensive rope, before taxes.