

Assignment: Approximate Numbers and Change of Units

Question 1. (3 marks) How many significant digits

- a. 50
- b. 50.
- c. 50.0
- d. 0.005
- e. 0.0050
- f. 3243

Question 2. (1 mark) How many significant digits Are in 2.410×1030 , why?

Question 3. (1 mark) Round

- a. 2342223.32 to 3 significant digits.
- b. 0.034200 to 1 significant digit.

Question 4. (4 marks) (use the correct number of signigicant figures)

- a. $45.2 + 16.730$
- b. $23 - 26.2$
- c. $16.7 \times 33.2 \times 16.72$
- d. $346 \div 22$
- e. $(32.2 + 16.235) \times 22$
- f. $(23.7 \times 13) - (23.5 \div 2.13)$

Question 5. (2 marks) Convert 2550 square feet to

- a. m^2
- b. inch^2

Question 6. (1 mark) Convert 21 000 psi (lbs/in^2) to Mpa.

Question 7. (2 marks) Convert 65 miles/hr to

- a. km/hr
- b. ft/sec

Question 8. (1 mark) Convert 1520 ft·lb bending moment to N·m (Newton meters).

Question 9. (1 mark) Convert a load of 2450 lbs into kN (kilo Newtons).

Question 10. (1 mark) Convert a load of 60 kN/m into lbs/ft.

Question 11. (1 mark) Given 250 lbs/ft^3 convert to kg/m^3 .