

Worksheet – Section 3C

1) Identify the significant digits.

a) 8234

b) 800

c) 1.001

d) 0.003

e) 0.0030

f) 350,000

g) 350.000

2) Round the number 123,553.6734

a) to the nearest one

b) to the nearest ten

c) using 1 significant digit

d) using 2 significant digits

e) using 3 significant digits

f) using 4 significant digits

Find the absolute and relative errors (as percentage) in the following measurements. **Round your answer to 4 significant digits as needed.**

3) Your true height is 1.73 meters (5 feet 8 inches), but a nurse in your doctor's office measures your height as 1.76 meters.

4) The label on a bag of concrete says “60 pounds,” but the true weight is only 58 pounds.

5) Your bike speedometer reads 26 miles per hour when you are actually traveling 24 miles per hour.

6) Your actual body temperature is 98.4°F , but your thermometer gives a reading of 97.9°F .