



Name: _____ Period: _____

Assigned on Tuesday, Sep 2, 2025

3.1 Significant Figures, Accuracy, and Precision Practice**Due Wednesday, Sep 3, 2025**

1) How many significant figures are in each of the following numbers?

1) 3,400

6) 23.010

11) 45,000

2) 0.000450

7) 202

12) 300,000,005

3) 4050.0

8) 0.02000

13) 40.030010

4) 20010

9) 0.000025

14) 3.00

5) 0.00300

10) 5120

15) 400.

2) Perform the following calculations and round your answer s the correct number of significant figures.

16) $8.5 \times 3.20 / 2.350 =$ 21) $23.4 - 0.25 =$ 26) $6.5 \times 325 =$ 17) $0.0030 / 13.0 =$ 22) $0.35 + 12.4 =$ 27) $9.20 / 193.2 =$ 18) $450 / 121 =$ 23) $1300 + 12.50 =$ 28) $0.00350 \times 24,890 =$ 19) $0.004 / 0.000025 =$ 24) $25.00 + 0.1 =$ 29) $4.530 + 34.0 =$ 20) $7.410 \times 14.0 =$ 25) $2.58 - 2.18 =$ 30) $7800 - 34.5$

3) Identify whether each of the following is accurate (a) , precise (p), both (b), or neither (n).



4) A student makes three measurements of the length of a soccer field. Her measurements are 92.4 m, 92.2 m, and 92.5 m. If the soccer field is actually 90.0 m, comment on the accuracy and precision of the student's measurements.

5) A student is told to make three measurements in an experiment for the mass of a beaker to the nearest 0.1 g: 50.6 g, 51.4 g, and 51.8 g. If the beaker has an actual mass of 56.5 g, comment on the accuracy and precision of the student's measurements. Be sure to use the data (numbers!) to support your answer!

6) Make a precise reading for the graduated cylinder measurement to the right.

