Worksheet: Understanding and Applying Significant Figures

Question 1

What is the population of a town rounded to 2 significant figures if:

- The exact population is 25,632 _____
- The exact population is 31,497 _____

Question 2

Given the population of a town is 52,000 rounded to 2 significant figures:

- What is the lowest possible number of people that could be represented by this rounding?

  _____

- What is the greatest possible number of people that could be represented by this rounding?

Question 3

The population of a town is rounded to 2 significant figures as 43,000. Answer the following:

- Write down the range of population numbers that could result in this rounding.

  Greatest:_____ Smallest:_____

Question 4

What would this calculation look like with every number rounded to 1 significant figure?

$$\frac{56.87 \times 2.34}{18.74 \times 0.0456}$$

Question 5

What would this calculation look like with every number rounded to 2 significant figures?

$$\frac{145.3 + 27.89}{6.354 \times 1.223}$$

Question 6

What would this calculation look like with every number rounded to 3 significant figures?

$$\frac{9.876 \times 3.141}{12.78 - 0.987}$$

Question 7

What would this calculation look like with every number rounded to 1 significant figure?

$$\frac{0.0785 \times 16.32}{47.98 + 9.812}$$

Question 8

a. What would this calculation look like with every number rounded to 2 significant figures?

$$\frac{7.654 + 19.83}{4.236 \times 0.0789}$$