CALCULATIONS USING SIGNIFICANT FIGURES

Name _____

When multiplying and dividing, limit and round to the least number of significant figures in any of the factors.

> **Example 1:** 23.0 cm x 432 cm x 19 cm = 188,784 cm³
>
> The answer is expressed as 190,000 cm³ since 19 cm has only two significant figures.

When adding and subtracting, limit and round your answer to the least number of decimal places in any of the numbers that make up your answer.

> **Example 2:** 123.25 mL + 46.0 mL + 86.257 mL = 255.507 mL
>
> The answer is expressed as 255.5 mL since 46.0 mL has only one decimal place.

Perform the following operations expressing the answer in the correct number of significant figures.

1. 1.35 m x 2.467 m = _____

2. 1,035 m² ÷ 42 m = _____

3. 12.01 mL + 35.2 mL + 6 mL = _____

4. 55.46 g − 28.9 g = _____

5. .021 cm x 3.2 cm x 100.1 cm = _____

6. 0.15 cm + 1.15 cm + 2.051 cm = _____

7. 150 L³ ÷ 4 L = _____

8. 505 kg − 450.25 kg = _____

9. 1.252 mm x 0.115 mm x 0.012 mm = _____

10. 1.278×10^3 m² ÷ 1.4267×10^2 m = _____