

Calculations with Significant Figures Worksheet

Perform the following calculations, and express your answer using correct units and significant figures.

Practice (Answers at bottom of this page!):

- a.) $0.304 \text{ m} \times 1.2000 \text{ m} =$ _____
- b.) $400. \text{ g} / 2.564 \text{ mL} =$ _____
- c.) $1828 \text{ mL} - 6.9 \text{ mL} =$ _____
- d.) $3.45 \text{ cm} + 0.79864 \text{ cm} =$ _____
- e.) $0.304 \text{ m} \times 1.2 \text{ m} =$ _____
- f.) $400 \text{ g} / 2.5 \text{ mL} =$ _____
- g.) $1800. \text{ cm}^3 - 6.9 \text{ cm}^3 =$ _____
- h.) $(3.45 \text{ cm} + 0.79864 \text{ cm}) / 2.7 \text{ s} =$ _____

Problems

- 1.) $47.0 \text{ m} / 2.2 \text{ s} =$ _____
- 2.) $140 \text{ cm} \times 35 \text{ cm} =$ _____
- 3.) $5.88 \text{ kg} / 200 \text{ m}^3 =$ _____
- 4.) $0.0050 \text{ m}^2 \times 0.042 \text{ m} =$ _____
- 5.) $300.3 \text{ L} / 180. \text{ s} =$ _____
- 6.) $33.00 \text{ cm}^2 \times 2.70 \text{ cm} =$ _____
- 7.) $35,000 \text{ kJ} / 0.250 \text{ min} =$ _____
- 8.) $22.0 \text{ m} + 5.23 \text{ m} + 15.5 \text{ m} =$ _____
- 9.) $0.042 \text{ kg} + 1.229 \text{ kg} + 0.502 \text{ kg} =$ _____
- 10.) $170 \text{ cm}^2 + 3.5 \text{ cm}^2 - 28 \text{ cm}^2 =$ _____
- 11.) $0.003 \text{ L} + 0.0048 \text{ L} + 0.100 \text{ L} =$ _____
- 12.) $24.50 \text{ mL} + 4.30 \text{ mL} + 10.2 \text{ mL} =$ _____
- 13.) $3,200 \text{ mg} + 325 \text{ mg} - 688 \text{ mg} =$ _____
- 14.) $14,000 \text{ kg} + 8,000 \text{ kg} + 590 \text{ kg} =$ _____
- 15.) $100.0 \text{ mL} + 200.0 \text{ mL} =$ _____ mL = _____ L
- 16.) $(0.0300 \text{ M})(0.105 \text{ L}) =$ _____
- 17.) $0.400 \text{ mol} / (0.500 \text{ L} + 0.025 \text{ L}) =$ _____
- 18.) $(0.15 \text{ M})(0.1000 \text{ L}) =$ _____
- 19.) $\frac{1}{2} (0.015 \text{ mol}) / 0.15 \text{ L} =$ _____
- 20.) $0.120 \text{ mol} \times 150.817 \text{ g/mol} =$ _____

Practice Answers:

a.) $0.304 \text{ m} \times 1.2000 \text{ m} = 0.365 \text{ m}^2$
 b.) $400. \text{ g} / 2.564 \text{ mL} = 156 \text{ g/mL}$
 c.) $1828 \text{ mL} - 6.9 \text{ mL} = 1821 \text{ mL}$
 d.) $3.45 \text{ cm} + 0.79864 \text{ cm} = 4.25 \text{ cm}$
 e.) $0.304 \text{ m} \times 1.2 \text{ m} = 0.36 \text{ m}^2$
 f.) $400 \text{ g} / 2.5 \text{ mL} = 200 \text{ g/mL}$
 g.) $1800. \text{ cm}^3 - 6.9 \text{ cm}^3 = 1793 \text{ cm}^3$
 h.) $(3.45 \text{ cm} + 0.79864 \text{ cm}) / 2.7 \text{ s} = 1.6 \text{ cm/s}$