

How many significant figures are in the following measurements?

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|-----------------|-------------------|---------------------------------|----------------------------------|
| 1. _____ 5.432 | 6. _____ 429.3 | 11. _____ 2500 | 16. _____ 8365.6 |
| 2. _____ 40.319 | 7. _____ 2873.0 | 12. _____ 2500.0 | 17. _____ 0.002300 |
| 3. _____ 146 | 8. _____ 99.9 | 13. _____ 1.04×10^{14} | 18. _____ 7.500×10^{-4} |
| 4. _____ 3.285 | 9. _____ 0.000235 | 14. _____ 3.58×10^{-9} | 19. _____ 3.92×10^8 |
| 5. _____ 0.189 | 10. _____ 144 | 15. _____ 48.57193 | 20. _____ 1.00×10^3 |

Add, using significant figures:

- 12 cm + 0.031 cm + 7.969 cm = _____
- 0.085 cm + 0.062 cm + 0.14 cm = _____
- 3.419 g + 3.912 g + 7.0518 g + 0.00013 g = _____
- 30.5 g + 16.82 g + 41.07 g + 85.219 g = _____
- 143.0 cm + 289.25 cm + 68.45 cm + 6.00 cm = _____
- 29.49 cm + 83.46 cm + 107.05 cm + 26.618 cm = _____
- 0.0653 g + 0.08538 g + 0.07654 g + 0.0432 g = _____
- 1.8×10^{-2} cm + 3.25×10^{-5} cm + 4.6×10^{-5} cm = _____
- 63.489 mL + 126.2 cL + 68.85 L + 12.05 hL = _____ L
- 2.3×10^2 g + 4.62×10^2 mg + 3.852×10^2 cg = _____ g

Subtract, using significant figures:

- | | |
|------------------------------------|--------------------------------------|
| 1. 41.025 cm – 23.28 cm = _____ cm | 4. 62.47 g – 39.9 g = _____ g |
| 2. 289 g – 43.7 g = _____ g | 5. 40.008 mL – 29.0941 mL = _____ mL |
| 3. 145.63 mL – 28.9 mL = _____ mL | |

Multiply, using significant figures:

- | | |
|--------------------------------|---|
| 1. 2.89 cm X 4.01 cm = _____ | 9. $(4.8 \times 10^2 \text{ m}) \times (2.101 \times 10^3 \text{ m}) =$ _____ |
| 2. 17.3 cm X 6.2 cm = _____ | 10. $(9.13 \times 10^{-4} \text{ cm}) \times (1.2 \times 10^{-3} \text{ cm}) =$ _____ |
| 3. 3.08 m X 1.2 m = _____ | 11. 4.218 cm X 6.5 cm = _____ |
| 4. 5.00 mm X 7.3216 mm = _____ | 12. 150.0 m X 4.00 m = _____ |
| 5. 20.8 dm X 123.1 dm = _____ | 13. 282.2 km X 3.0 km = _____ |
| 6. 5 cm X 5 cm = _____ | 14. $(14 \times 10^{-8} \text{ m}) \times (3.25 \times 10^{-6} \text{ m}) =$ _____ |
| 7. 5.0 cm X 5 cm = _____ | 15. $(2.865 \times 10^4 \text{ m}) \times (1.47 \times 10^3 \text{ m}) =$ _____ |
| 8. 5.0 cm X 5.0 cm = _____ | |

Divide, using significant figures:

- | | |
|---|---|
| 1. $8.0271 \text{ cm}^2 \div 4.216 \text{ cm} =$ _____ | 4. $1.142 \times 10^{14} \text{ mm} \div 5.813 \times 10^{12} \text{ mm} =$ _____ |
| 2. $109.3758 \text{ m}^2 \div 5.813 \text{ m} =$ _____ | 5. $139.482 \text{ m}^2 \div 68.75 \text{ m} =$ _____ |
| 3. $24,789.4 \text{ km}^2 \div 43.5 \text{ km} =$ _____ | 6. $4.23 \text{ m}^2 \div 18.941 \text{ m} =$ _____ |