

Dividing by Powers of Ten

Decimal Point Placement

Divide 8.6 by 10; by 100; by 1,000.

$$\underline{8}.6 \div 10 = 0.86$$

There is 1 zero in 10.
Move the decimal point 1 place to the left.

$$\underline{0}8.6 \div 100 = 0.086$$

There are 2 zeros in 100.
Move the decimal point 2 places to the left.

$$\underline{00}8.6 \div 1,000 = 0.0086$$

There are 3 zeros in 1,000.
Move the decimal point 3 places to the left.

Divide 0.37 by 10; by 100; by 1,000.

$$\underline{0}.37 \div 10 = 0.037$$

Move the decimal point 1 place to the left.

$$\underline{00}.37 \div 100 = 0.0037$$

Move the decimal point 2 places to the left.

$$\underline{000}.37 \div 1,000 = 0.00037$$

Move the decimal point 3 places to the left.

Choose the correct quotient.

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|--------------------|-----------|----------|-----------|-------|
| 1. $0.680 \div 10$ | a. 6.8 | b. 0.068 | c. 0.0068 | _____ |
| 2. $3.5 \div 100$ | a. 0.0035 | b. 0.035 | c. 0.35 | _____ |
| 3. $0.6 \div 1000$ | a. 0.0006 | b. 0.06 | c. 0.006 | _____ |

Divide each number by 10.

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|--------------|----------------|----------------|---------------|
| 4. 45 _____ | 5. 312.3 _____ | 6. 0.9 _____ | 7. 0.03 _____ |
| 8. 702 _____ | 9. 0.475 _____ | 10. 8.67 _____ | 11. 1.8 _____ |

Divide each number by 100.

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|----------------|-----------------|------------------|------------------|
| 12. 45 _____ | 13. 383.2 _____ | 14. 0.08 _____ | 15. 0.328 _____ |
| 16. 60.2 _____ | 17. 1.835 _____ | 18. 597.06 _____ | 19. 0.9573 _____ |

Divide each number by 1,000.

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|---|-----------------|---------------|
| 20. 350 _____ | 21. 4,500 _____ | 22. 6.8 _____ |
| 23. 0.921 _____ | | |
| 24. Divide 23,000,000 by 1,000,000,000. _____ | | |