

Multiplying by Powers of Ten

Manipulating Decimals

Multiply 4.5 by 10; by 100; by 1,000.

$$4.\underline{5} \times 10 = 45$$

There is 1 zero in 10.

Move the decimal point 1 place to the right.

$$4.\underline{50} \times 100 = 450$$

There are 2 zeros in 100.

Move the decimal point 2 places to the right.

$$4.\underline{500} \times 1,000 = 4,500$$

There are 3 zeros in 1,000.

Move the decimal point 3 places to the right.

Multiply 0.72 by 10; by 100; by 1,000.

$$0.\underline{72} \times 10 = 7.2$$

Move the decimal point 1 place to the right.

$$0.\underline{72} \times 100 = 72$$

Move the decimal point 2 places to the right.

$$0.\underline{720} \times 1,000 = 720$$

Move the decimal point 3 places to the right.

Multiply each number by 10.

1. 26 _____ 2. 20 _____ 3. 0.2 _____ 4. 7.8 _____

5. 0.36 _____ 6. 0.05 _____ 7. 0.0062 _____ 8. 538.711 _____

Multiply each number by 100.

9. 38 _____ 10. 170 _____ 11. 0.5 _____ 12. 9.6 _____

13. 0.48 _____ 14. 0.0091 _____ 15. 0.03 _____ 16. 286.114 _____

Multiply each number by 1,000.

17. 45 _____ 18. 400 _____ 19. 0.5 _____ 20. 12.4 _____

21. 0.78 _____ 22. 0.0071 _____ 23. 0.091 _____ 24. 1,428.092 _____

Multiply each number by 1,000,000.

25. 0.254 _____ 26. 3.8 _____ 27. 45.2 _____

28. 0.80463 _____ 29. 0.000047 _____ 30. 6.9031 _____