

Name: Key

5th Grade Notes 6.6 Multiply Decimals by Powers of Ten p. 411

To multiply decimals by powers of ten:

-move the decimal point to the right the same number of places as the number of zeros (# gets bigger)

-add zeros at the end if necessary

-if it's a 10 with an exponent, move the decimal point the same number of places as the exponent

-don't forget, if there is no decimal point written, it's to the right of the ones place; Ex: $35 = 35.$

Ex: $32.25 \times 10 = 322.5$

322.5
move one place right

Ex: $24.7 \times 10^2 = 2,470$

24.70
2 places: add a zero

Ex: $7.46 \times 1,000 = 7,460$

7.460
3 places - fill in one zero

Ex: $45 \times 10,000 = 450,000$

no dec pt., so put after ones
450,000
4 places, fill in zeros