

Multiplying Decimals by 10, 100, or 1,000

You can use patterns to multiply decimals mentally by 10, 100, and 1,000.

Andrew starts selling his baseball cards for \$0.10 each. After selling 10 cards, he has made \$1.00. After selling 100 cards, he has made \$10.00.



\$0.10



$\$0.10 \times 10 = \1.00



$\$0.10 \times 100 = \10.00

When you multiply by

10 (10^1)

Move decimal point by 1 place to the right

100 (10^2)

Move decimal point by 2 places to the right

1,000 (10^3)

Move decimal point by 3 places to the right

If Andrew sold 1,000 cards, how much money would he make? _____

Mental Math For questions 1 through 4, find the product using mental math.

1. 6.1×10 _____

2. 100×37.98 _____

3. $92.3 \times 1,000$ _____

4. 0.418×100 _____

5. Myla has an antique flower vase that she bought for \$15.75 many years ago. The vase's value is now 1,000 times as great. What is the value of the vase? _____

6. Raul can hit a golf ball 26.4 yards. A.J. can hit a golf ball 10 times as far. How far can A.J. hit the ball? _____

7. Is 0.018 a reasonable answer for 1.8×100 ?
