Name _____

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 × 10 = $1.00 $0.10 × 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?

_____

_____