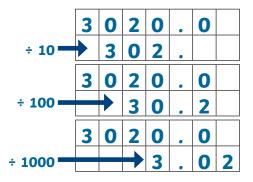
Dividing by 10, 100 or 1,000 Where Answers Are Decimals

When dividing a number by 10, 100 or 1,000 the value of each digit is divided sometimes giving a decimal answer.

$$3020 \div 1000 = 3.02$$

Each digit moves the necessary number of place to the right because dividing by 10 decreases the number.



Remember:

1.Keep the digits together. Don't let any 0's jump in!

2. Round to check:

$$340 \div 100 = 3.4$$

use
$$300 \div 100 = 3$$

3. Use the inverse to check:

$$3.4 \times 1000 = 3400$$

Multiplying Decimals by 10, 100 or 1000

When multiplying a decimal number by 10, 100 or 1000, the value of each digit is multiplied.

$$3.02 \times 10 = 30.2$$

$$3.02 \times 100 = 302$$

$$3.02 \times 1000 = 3020$$

Each digit moves the necessary number of places to the left because multiplying by 10, 100 or 1000 increases the number.

			3	•	0	2	
		3	0	•	2	+	× 10
			3		0	2	
	3	0	2	•	+		× 100
			3		0	2	
3	0	2	0				× 1000

Remember:

1. Keep the digits together. Don't let any Os jump in!

$$3.02 \times 100 = {}^{300.2}_{302}$$

2. Round to check:

use
$$3 \times 1000 = 3000$$

