

Check Your Answers on Decimal Place Value!

1. 205.037

To write the number “two **hundred** five and thirty-seven **thousandths**”, recall that “and” indicates the position of the decimal point. “Two **hundred** five” is written to the left of the decimal point and “thirty-seven **thousandths**” is written to the right of the decimal point with the last digit of 37 (the “7”) in the **thousandths** place. Use a “0” to represent the tenths place. (See the diagram below for place value positions.) Note that number value labels ending in “th” indicate values to the right of the decimal point.

2. 10,020.0018

To write the number “**ten thousand** twenty and eighteen **ten thousandths**”, recall once again that “and” indicates the position of the decimal point. Any problems with “**ten thousand** twenty”? “**Eighteen ten thousandths**”, written to the right of the decimal point, must have the final digit of 18 (the “8”) in the **ten thousandths** place, using “0” to represent both the tenths and hundredths place. (Refer to the diagram below for place value positions.) Again number value labels ending in “th” will be placed to the right of the decimal point.

3. 0.07

The fraction $\frac{7}{100}$, which would be stated as 7 **hundredths**, is written with the “7” in the **hundredths** place and a “0” to represent the tenths place and ones place. (Refer to the diagram below for place value positions.)

4. 7 (ten thousands place)

In Questions 4 – 7, recall place value:

7 **0** , **4** **3** **1** **.** **9** **5** **6** **2** **8**
 Ten Thousands Thousands Hundreds Tens Ones Tenths Hundredths Thousandths Ten Thousandths Hundred Thousandths

5. 8 (hundred thousandths place)

6. $4 + 6 = 10$ (hundreds place digit + the thousandths place digit)

7. $5 \times 3 = 15$ (hundredths place digit \times tens place digit)

8. 0 (thousandths place)

$2,687.\overline{09}$ is a repeating decimal. The bar above the digits 09 indicates that those digits repeat. In other words, $2,687.\overline{09}$ means $2,687.09090909\dots$ which means that “0” will be in the **thousandths** place.

In Questions 9 – 10: $987,654.\overline{321}$ means

9 **8** **7** , **6** **5** **4** **.** **3** **2** **1** **3** **2** **1** **...**
 Thousands Hundreds Tens Ones Tenths Hundredths Thousandths Ten Thousandths Hundred Thousandths Millionths

9. 2 (hundred thousandths place)

10. $7 + 1 = 8$ (thousands place digit + millionths place digit)

Perfect score? Yes! You’ve got this!! You’re ready to move on to the next section!!!