

Lesson 14: Rounding

Purpose of Lesson: You will learn how to round and estimate.

Words to Learn:

Round and **estimate** are two words that go together, and we use them in our daily activities. **Estimate** means *about how much*. **Round** means that the last digit(s) in your answer will be one or more **zeros (0)**.

For example, if something costs \$1.89, we estimate that it will cost **about** \$2.00. Or if a TV is priced at \$199, we know that it will cost about \$220, **with tax**.

This is how it works:

If you want to round a number to the **tens** place, these are the steps to follow:

- 1) Find the tens place.
- 2) Then, look at the number to its right.
- 3) If that number is 5 or more, round to the next ten.
- 4) If the number to the right is 4 or less, **leave the tens number alone** and replace the number to the right with a zero (0).

Let's do some together.

Example a) Round **18** to the **nearest ten**.

- 18**
- 1) The **1** is in the tens place.
 - 2) Look at the **8**.
 - 3) **8** is larger than 5, so you round up to **20**, since that is the next ten.

Answer: 18 rounded to the nearest ten is **20**

Example b) Round **34** to the **nearest ten**.

- 34
- 1) The **3** is in the tens place.
 - 2) Look at the **4**.
 - 3) It is **less than 5**, so you replace the 4 with a **0**.

Answer: 34 rounded to the nearest ten is **30**

Example c) Round **172** to the **nearest ten**.

- 172
- 1) The **7** is in the tens place.
 - 2) Look at the **2**.
 - 3) It is **less than 5**, so you replace the 2 with a **0**.

Answer: 172 rounded to the nearest ten is **170**



Note: We will use the symbol \approx to show numbers rounded off.

Now you try:

Take Lesson 14 Quiz 1



You may round and estimate to any place. Just follow the same steps in different places.

Example d) Round 4,876 to the **nearest hundred**.

- 4,876
- 1) The **8** is in the hundreds place.
 - 2) Look at the **7**, it's in the next place to the right.
 - 3) **7 is larger than 5**, so you raise the 8 to **9**, and replace the other two digits with zeros.

Answer: 4,876 rounded to the nearest hundred is **4,900**.

Example e) Round 108,321 to the **nearest thousand**.

108,321 1) The **8** is in the thousands place.

2) Look at the **3**, it's in the next place to the right.

3) **3** is **less than** 5, so leave the **8** alone and replace the digits to the right with zeros.

Answer: 108,321 rounded to the nearest thousand is 108,000 .
--

Now it's your turn to try some:

[**Take Lesson 14 Quiz 2**](#)