

Round to the Nearest Ten or Hundred

When you **round** a number, you find a number that tells you *about* how much or *about* how many.

Use place value to round 76 to the nearest ten.

Step 1 Look at the digit to the right of the tens place.

- If the ones digit is 5 or more, the tens digit increases by one.
- If the ones digit is less than 5, the tens digit stays the same.

Step 2 Write zero for the ones digit.

So, 76 rounded to the nearest ten is **80**.

Think: To round to the nearest hundred, look at the tens digit. So, 128 rounded to the nearest hundred is **100**.

76
↑
ones place

The digit in the ones place is 6.
 $6 > 5$

So, the digit 7 in the tens place increases to 8.

128
↑
tens place

Round to the nearest ten.

1. 24 _____

2. 15 _____

3. 47 _____

4. 42 _____

5. 81 _____

6. 65 _____

Round to the nearest hundred.

7. 176 _____

8. 395 _____

9. 431 _____

10. 421 _____

11. 692 _____

12. 470 _____

Estimate Sums

An **estimate** is a number close to an exact amount.

You can use **compatible numbers** to estimate.

Compatible numbers are easy to compute mentally and are close to the real numbers.

Estimate. Use compatible numbers.

$73 + 21 = \blacksquare$

So, $73 + 21$ is about **100**.

$$\begin{array}{r} 73 \longrightarrow 75 \\ + 21 \longrightarrow + 25 \\ \hline 100 \end{array}$$

Another way to estimate is to round numbers to the same place value.

Estimate. Round each number to the nearest hundred. $214 + 678 = \blacksquare$

Step 1 Look at the digit to the right of the hundreds place.

- $1 < 5$, so the digit 2 stays the same.
- $7 > 5$, so the digit 6 increases by 1 to become 7.

$$\begin{array}{r} 214 \longrightarrow 200 \\ + 678 \longrightarrow + 700 \\ \hline 900 \end{array}$$

Step 2 Write zeros for the tens and ones places.

So, $214 + 678$ is about **900**.

Use rounding or compatible numbers to estimate the sum.

$$\begin{array}{r} 1. \quad 42 \quad \underline{\hspace{1cm}} \\ + 36 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 523 \quad \underline{\hspace{1cm}} \\ + 117 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 235 \quad \underline{\hspace{1cm}} \\ + 374 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 23 \quad \underline{\hspace{1cm}} \\ + 99 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 254 \quad \underline{\hspace{1cm}} \\ + 167 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 299 \quad \underline{\hspace{1cm}} \\ + 199 \quad + \underline{\hspace{1cm}} \\ \hline \end{array}$$

Use the Break Apart Strategy to Add

You can use the break apart strategy to add.

Add. $263 + 215$

Think and Record

Step 1 Estimate. Round to the nearest hundred.

$$300 + 200 = 500$$

Step 2 Start with the hundreds. Break apart the addends. Then add each place value.

$$263 = 200 + 60 + 3$$

$$215 = 200 + 10 + 5$$

$$400 + 70 + 8$$

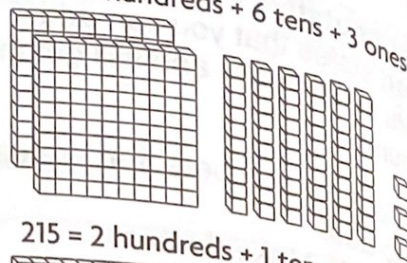
Step 3 Add the sums.

$$400 + 70 + 8 = 478$$

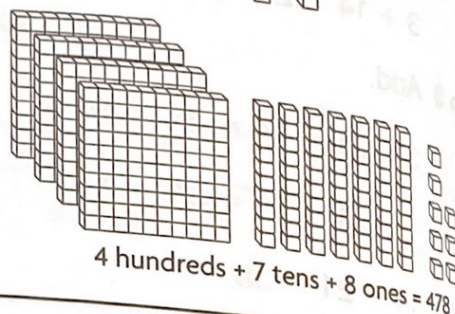
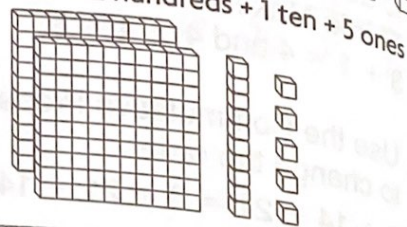
So, $263 + 215 = 478$.

Model

$$263 = 2 \text{ hundreds} + 6 \text{ tens} + 3 \text{ ones}$$



$$215 = 2 \text{ hundreds} + 1 \text{ ten} + 5 \text{ ones}$$



$$4 \text{ hundreds} + 7 \text{ tens} + 8 \text{ ones} = 478$$

Estimate. Then use the break apart strategy to find the sum.

1. Estimate: _____

$$242 =$$

$$+ 536 =$$

2. Estimate: _____

$$469 =$$

$$+ 413 =$$

3. Estimate: _____

$$385 =$$

$$+ 519 =$$

4. Estimate: _____

$$527 =$$

$$+ 266 =$$

Use Place Value to Add

You can use place value to add 3-digit numbers.

Add. $268 + 195$ **Estimate.** $300 + 200 = 500$

Step 1 Add the ones. If there are 10 or more ones, regroup as tens and ones.

$$\begin{array}{r}
 1 \\
 268 \\
 + 195 \\
 \hline
 3
 \end{array}$$

8 ones + 5 ones = 13 ones
13 ones = 1 ten 3 ones

Step 2 Add the tens. Regroup the tens as hundreds and tens.

$$\begin{array}{r}
 11 \\
 268 \\
 + 195 \\
 \hline
 63
 \end{array}$$

1 ten + 6 tens + 9 tens = 16 tens
16 tens = 1 hundred 6 tens

Step 3 Add the hundreds.

$$\begin{array}{r}
 11 \\
 268 \\
 + 195 \\
 \hline
 463
 \end{array}$$

1 hundred + 2 hundreds + 1 hundred = 4 hundreds

So, $268 + 195 = 463$.

Estimate. Then find the sum.

1. Estimate: _____

$$\begin{array}{r}
 156 \\
 + 323 \\
 \hline
 \end{array}$$

2. Estimate: _____

$$\begin{array}{r}
 347 \\
 + 390 \\
 \hline
 \end{array}$$

3. Estimate: _____

$$\begin{array}{r}
 472 \\
 + 108 \\
 \hline
 \end{array}$$

4. Estimate: _____

$$\begin{array}{r}
 239 \\
 + 570 \\
 \hline
 \end{array}$$

5. Estimate: _____

$$\begin{array}{r}
 110 \\
 + 576 \\
 \hline
 \end{array}$$

6. Estimate: _____

$$\begin{array}{r}
 258 \\
 + 324 \\
 \hline
 \end{array}$$

7. Estimate: _____

$$\begin{array}{r}
 471 \\
 + 269 \\
 \hline
 \end{array}$$

8. Estimate: _____

$$\begin{array}{r}
 585 \\
 + 309 \\
 \hline
 \end{array}$$