## Write Three-Digit Numbers Different Ways

Read and try to solve the problem below.
Ryan has a collection of 284 shells. What is another way to write 284 using numbers? What is another way to write 284 using words?

## TRY IT

Math Toolkit

- base-ten blocks $\mathbb{C}$
- hundreds place-value charts
- 200 charts
- open number lines $\mathbb{Q}$


## Write Three-Digit Numbers Different Ways continued

$\qquad$

Explore different ways to understand writing three-digit numbers.

## Ryan has a collection of $\mathbf{2 8 4}$ shells. What is another way to write 284 using numbers? What is another way to write 284 using words?

## PICTURE IT

You can use base-ten blocks to show hundreds, tens, and ones. Then write the number in expanded form and in words.

two hundred
eighty four

## MODEL IT

You can show hundreds, tens, and ones in a chart.
Then write the values in numbers and words.

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| $\mathbf{2}$ | $\mathbf{8}$ | $\mathbf{4}$ |
| 2 hundreds | +8 tens | +4 ones |
| two hundred | + eighty | + four |

## Write Three-Digit Numbers Different Ways continued

$\qquad$

## CONNECT IT

Now you will use the problem from the previous page to help you understand how to write three-digit numbers in different ways.
(1) Write the number of Ryan's shells using only digits.

Ryan has $\qquad$ shells.
(2) Look at Picture It. Write 284 using words.
(3) Look at Model It.
a. How many hundreds, tens, and ones are there?
$\qquad$ hundreds $\qquad$ tens $\qquad$ ones
b. Write the number in expanded form to show the total number of shells as an equation.
$\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=284$

## (4) REFLECT

Look back at your Try It, strategies by classmates, and Picture It and Modell It. Which models or strategies do you like best for writing three-digit numbers? Explain.

# Write Three-Digit Numbers Different Ways continued 

$\qquad$

## APPLY IT

Use what you just learned to solve these problems.
5 There are 361 fish in the large tank at the aquarium. How do you write 361 in word form? Show your work.

## Solution

$\qquad$
6 Ella makes one hundred eighteen friendship bracelets. How would Ella write that number in expanded form? Show your work.

## Solution

$\qquad$
7 How do you write the number shown in the chart using words?

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 5 | 7 | 0 |

(A) five seven zero
(B) fifty-seven
(C) five hundred seventeen
(D) five hundred seventy

## Write Three-Digit Numbers Different Ways Practice Pages

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Study the Example showing how to write a three-digit number in different ways. Then solve problems 1-6.

## EXAMPIE

In a video game, Eduardo scored 753 points.
Write this number three different ways.
Using only digits: 753
Using expanded form:
$700+50+3$
Using words:
seven hundred + fifty + three $=$ seven hundred fifty-three

Use the chart below for problems 1-3.

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 3 | 2 | 2 |

(1) Write the number using only digits. $\qquad$
2 Write the number in expanded form.
$\qquad$ $+$ $\qquad$ $+$ $\qquad$
(3) Write the number using words.

## Write Three-Digit Numbers Different Ways Practice Pages continued

$\qquad$
(4) There are 225 building bricks in a box.

How would you write 225 in expanded form?
Fill in the chart and then write the answer.

| Hundreds | Tens | Ones |
| :--- | :--- | :--- |
|  |  |  |

## Solution

$\qquad$
5 Helen counts her crayons. She writes the number as $700+3$.
Write the number using only digits.

## Solution

$\qquad$
Write the number using only words.

## Solution

$\qquad$
6 What are other ways to show each number?
Look at each number shown using only digits.
Draw a line to the expanded form and to the words for each number.
$500+60+1651$ six hundred fifteen
$600+10+5$
615
five hundred sixty-one
$600+50+1$
561 six hundred fifty-one

## Ways to Compare Three-Digit Numbers

$\qquad$

Read and try to solve the problem below.
These two paintings are in the school art contest. Which painting has more votes?


Painting A: 467 votes


Painting B: 463 votes

## TRY IT

## Ways to Compare Three-Digit Numbers continued

$\qquad$

Explore more ways to understand comparing three-digit numbers.

These two paintings are in the school art contest. Which painting has more votes?


Painting A: 467 votes


Painting B: 463 votes

## PICTURE IT

You can show the numbers in a quick drawing.


## MODEL IT

You can model the numbers in a chart.

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 4 | 6 | 7 |
| 4 | 6 | 3 |

# Ways to Compare Three-Digit Numbers continued 

$\qquad$

## CONNECT IT

Now you will use the problem from the previous page to help you understand more ways to compare three-digit numbers.
(1) Which place do you need to look at to compare the numbers of votes? Why?

2 Complete two different comparisons of 467 and 463.
$\qquad$
(3) Why can 467 and 463 be compared two ways?

4 Which painting has more votes? How do you know?

## (5) REFLECT

Look back at your Try It, strategies by classmates, and Picture It and Model It. Which models or strategies do you like best for comparing three-digit numbers in different ways? Explain.

## Ways to Compare Three-Digit Numbers continued

$\qquad$

## RPPLY IT

Use what you just learned to solve these problems.
6 Write $>$ or $<$ to compare each pair of numbers.
a. $264 \bigcirc 462$
b. 372

c. 954

950
d. 876
 867
e. 718

f. $653 \bigcirc 553$
(7) Write two different ways to compare 772 and 774 using $<$ and $>$. Show your work.

## Solution

$\qquad$
8 Hope and Sara are collecting pennies. Hope has 189 pennies. Sara has 186 pennies. Which comparisons are correct?
(A) $189<186$
(B) $186<189$
(C) $189>186$
(D) $186>189$
(ㄷ) $186=189$

## Ways to Compare Three-Digit Numbers Practice Pages

$\qquad$

Study the Example showing how to compare three-digit numbers. Then solve problems 1-8.

## EXAMPIE

Compare 528 and 523.
The hundreds are the same.
The tens are the same.
Compare the ones.
8 ones is greater than 3 ones.

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 5 | 2 | 8 |
| 5 | 2 | 3 |

$528>523$ and $523<528$

Ned and Vera are playing a game. Ned has 142 points, and Vera has 147 points.
(1) Write the numbers in the chart.

| Hundreds | Tens | Ones |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

(2) Complete the comparison of 142 and 147.
$\qquad$ $>$ $\qquad$
(3) Which place did you have to look at to compare 142 and 147 ? Why?

## Ways to Compare Three-Digit Numbers Practice Pages continued

$\qquad$
(4) Complete two different comparisons of 824 and 829 .
$\qquad$ $>$ $\qquad$ and $\qquad$ $<$ $\qquad$
(5) Complete two different comparisons of 353 and 351.
$\qquad$ $>$ $\qquad$ and $\qquad$ $<$ $\qquad$
6 Complete two different comparisons of 675 and 629.
$\qquad$ $>$ $\qquad$ and $\qquad$ < $\qquad$
7 Write $>,<$, or $=$ to compare each pair of numbers.
a. 465
 467
b. 392
392
c. 885

882
d. 214
 312
e. 691
 691
f. 484
 394

8 Han plays three games. Which game has the greatest score? Which game has the least score? Tell how you know.

Game 1:328
Game 2: 289
Game 3: 325
$\qquad$

Read and try to solve the problem below.

## There are 476 rocks and 148 minerals in a museum display. What is the total number of rocks and minerals in the display?

## TRY IT

- connecting cubes
- base-ten blocks $\mathbb{Q}$
- number charts
- hundreds place-value mats
- open number lines


## Adding Three-Digit Numbers continued

Explore more ways to understand adding three-digit numbers.

There are 476 rocks and 148 minerals in a museum display. What is the total number of rocks and minerals in the display?

## MODEL IT

You can show each number as hundreds, tens, and ones.

$$
\begin{aligned}
476 & \longrightarrow 4 \text { hundreds }+7 \text { tens }+6 \text { ones } \\
+148 & \frac{1 \text { hundred }+4 \text { tens }+8 \text { ones }}{5 \text { hundreds }+11 \text { tens }+14 \text { ones }}
\end{aligned}
$$

## MODEL IT

You can add hundreds, then tens, then ones.

$$
\begin{aligned}
476 \\
+148
\end{aligned} \text { 年 } 400+100
$$

$500+110+14$
MODEL IT
You can add ones, then tens, then hundreds.

$$
\begin{aligned}
& 476 \\
&+148 \\
&+14 \\
& \hline 110 \longrightarrow 70+8 \\
& 500 \longrightarrow 400+100
\end{aligned}
$$

$$
14+110+500
$$

## Adding Three-Digit Numbers continued

## CONNECT IT

Now you will use the problem from the previous page to help you understand another way to add.
(1) Write the number of ones, tens, and hundreds.
$14=$ $\qquad$ ones $110=$ $\qquad$ tens $500=$ $\qquad$ hundreds

2 You can regroup when you have 10 or more ones or 10 or more tens.
Regroup.
476
Fill in the blanks.

| +148 |  |
| ---: | :--- |
| 14 | $\longrightarrow \ldots \ldots \ldots$. ten and 4 ones |
| 110 | $\longrightarrow \ldots \ldots \ldots$. hundred and $\ldots \ldots \ldots .$. ten |
| 500 | $\longrightarrow 5$ hundreds |

(3) Look at problem 2. Write the total number of ones, tens, and hundreds after regrouping.
$\ldots . . . . . .$. ones $+\ldots . . \ldots . .$. tens $+\ldots . . . . .$. hundreds

4 Why should you get the same total when you use different strategies to find $476+148$ ?

## (5) REFLECT

Look back at your Try It, strategies by classmates, and Modell Its. Which models or strategies do you like best for adding three-digit numbers? Explain.
$\qquad$
$\qquad$
$\qquad$

# Adding Three-Digit Numbers continued 

## APPLY IT

Use what you just learned to solve these problems.
6 What is $649+184$ ? Show your work.

## Solution

$\qquad$
$\qquad$
7 Find the sum. Show your work.
427
$+297$

## Solution

8 Explain how you would find the sum $375+545$.

## Adding Three-Digit Numbers Practice Pages continued

$\qquad$

Study the Example showing how to add hundreds, tens, and ones.
Then solve problems 1-5.

## EXAMPME

Find $346+487$.

You can add hundreds, then tens, then ones.

$$
\begin{aligned}
& 346 \\
&+487 \\
&+700 \longrightarrow 300+400 \\
& 120 \longrightarrow 40+80 \\
& 13 \longrightarrow 6+7
\end{aligned}
$$

$$
700+120+13=833
$$

You can add ones, then tens, then hundreds.

$$
346
$$

$$
+487
$$

$$
13 \longrightarrow 6+7
$$

$$
120 \longrightarrow 40+80
$$

$$
700 \longrightarrow 300+400
$$

$$
13+120+700=833
$$

## Mina's class collects 368 cans to recycle. Willa's class collects

 254 cans.1. Fill in the boxes to show how you can add hundreds, then tens, then ones.

$$
368
$$



110
$\square$
2 How many cans do the classes collect altogether? Fill in the blanks.
$\qquad$ $+110+$ $\qquad$ $=$ $\qquad$

# Adding Three-Digit Numbers Practice Pages continued 

3 Show how to find $579+358$.
(4) Show how you can add 157 and 296.

5 Find the greatest possible sum by using two of the numbers in the box below. Then find the least possible sum. Tell how you solved the problem.

| 268 | 275 | 242 | 259 |
| :--- | :--- | :--- | :--- |

