

New

PIONEERS  
GRADED

MATHS



Book 4

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# Place Value Through Hundred Thousands

Write each number in three other ways.

**267 thousand, 613**

**Word form:** two hundred sixty-seven thousand, six hundred and thirteen.

**Expanded form:**  $200,000 + 60,000 + 7,00 + 600 + 10 + 3$

**Standard form:** 267, 613

425,718

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$700,00 + 60,000 + 1,000$   
 $+ 200 + 30 + 5$

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Write the value of the coloured digit.

87,**5**38

**66**,424

815,**6**32

Find each missing number.

$$9,000 + \square + 201 = 9,621$$

$$\square + 5,000 + 600 + 70 + 9 = 15,679$$

$$400,000 + 30,000 + 6,000 + 800 + \square + 3 = 436,873$$

Think

What is the value of the digit in the hundred thousands place in the number 129,563 ?



# How Big Is One Million?

Use the chart to answer the following questions.

$1 \times 1,000,000 = 1,000,000$	$\longrightarrow$	1 time 1 million = 1 million
$10 \times 100,000 = 1,000,000$	$\longrightarrow$	10 times 1 hundred thousand = 1 million
$100 \times 10,000 = 1,000,000$	$\longrightarrow$	100 times 10 thousand = 1 million
$1,000 \times 1,000 = 1,000,000$	$\longrightarrow$	1,000 times 1 thousand = 1 million
$10,000 \times 100 = 1,000,000$	$\longrightarrow$	10,000 times 1 hundred = 1 million
$100,000 \times 10 = 1,000,000$	$\longrightarrow$	100,000 times ten = 1 million
$1,000,000 \times 1 = 1,000,000$	$\longrightarrow$	1,000,000 times 1 = 1 million

**How many tens are in 1,000,000 ?**

Chart shows 100,000 times ten = 1 million.

**There are 100,000 tens in 1,000,000.**

How many ones are there in 1,000,000 ? \_\_\_\_\_

How many hundred thousands are in 1,000,000 ? \_\_\_\_\_

How many thousands are there in 1,000,000 ? \_\_\_\_\_

Use the chart to complete these problems.

$$1,000 \times \boxed{\phantom{000}} = 1,000,000$$

$$10 \times \boxed{\phantom{00000}} = 1,000,000$$

$$100 \times \boxed{\phantom{000000}} = 1,000,000$$

# Place Value Through Hundred Millions

Here are four ways to write the same number.

**Standard form:** 425, 451, 760

**Word form:** four hundred twenty-five million, four hundred fifty one thousand, seven hundred and sixty.

**Short word form:** 425 million, 541 thousand, 670

**Expanded form:**  $400,000,000 + 20,000,000 + 5,000,000 + 400,000 + 50,000 + 1,000 + 700 + 60$

Write each number in word form and short word form.

713, 584, 256

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$100,000,000 + 8,000,000 + 300,000 + 800 + 40$

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Write the number in standard form and expanded form.

622 million , 852 thousand , 400

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**Think**

Write two 8-digit numbers that have a 4 in the millions place, a 6 in ten thousands place, and a 9 in the ones place.

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# Compare Numbers

Compare **52,461** and **52,820**

Use a number line.



**52,820** comes to the right of 52,461 on the number line. So, **52,461 < 52,820**.

Compare, Write  $>$ ,  $<$ , or  $=$  for each

632  623

3,225  2,989

6,349  1,921

301,634  103,364

651,201  651,201

350,219,621  530,219,621

60,000  60 thousands

4 hundreds  4,000

5 ten thousands  500,000



# Order Numbers

Order these numbers from least to greatest.

76,251    74,420    75,429

Line up the digits by place value.

74,420

75,429

76,251

Compare the digits that are different.

6 is the greatest digit, so 76,251 the greatest number.

Now, Compare the other two number.

74,420

75,429

$4 < 5$  so 74,420 is smaller.

So the order of the numbers from least to greatest is:

74,420    75,429    76,251

Write the numbers in order from least to greatest.

6,200    2,060    6,002

\_\_\_\_\_

10,177    11,651    9,364

\_\_\_\_\_

Write the numbers in order from greatest to least.

13,426    13,326    13,226

\_\_\_\_\_

37,115    37,151    36,864

\_\_\_\_\_

# Round Numbers

Round each number to the place of the coloured digit.

Round the number **135,721** to the nearest thousand

Find the place you want to round to.

13**5**,721  
↑  
thousands place

If the digit to its right is 5 or greater, then 5 the digit in the rounded place increases.

135,721 rounds to 136,000

42 519  
\_\_\_\_\_

37 640  
\_\_\_\_\_

19,950  
\_\_\_\_\_

734,012  
\_\_\_\_\_

4,791,202  
\_\_\_\_\_

4,663,830  
\_\_\_\_\_

6031,061,002  
\_\_\_\_\_

Think

Ali drove 2,769 miles on his cross country trip. He rounded that number to 2,800 miles when he spoke of the trip. To which place was the number rounded?

Show your work



# Addition Properties

**The commutative Property:** When you change the order of the addends, the sum stays the same.

$$32 + 67 = 67 + 32$$
$$99 = 99$$

**Associative Property:** When three or more numbers are added the sum is the same regardless of the order of the addends

$$(18+14) + 25 = (18+25) + 14 = 18 + (25+14)$$

$$32 + 25 = 43 + 14 = 18 + 39$$

$$57 = 57 = 57$$

**The way you group the addends doesn't matter.**

**The zero Property:** The zero added to any number is the same as the original number.

$$850 + 0 = 850$$

**Copy and complete each number sentences. Tell which property of addition you used.**

$$32 + 67 = \square + 32$$

$$540 + 0 = \square$$

$$(15 + 7) + 23 = 15 +$$

$$(27 + 18) + 13 = 27 +$$

**Use the Associative Property to help you find each sum mentally.**

$$93 + 25 + 25 =$$

$$151 + 62 + 49 =$$

$$422 + 345 + 78 =$$

**Think**

On Tuesday Qusim picked 26 apples of a tree. On Wednesday, he picked 15 apples of the tree. On Thursday, he picked the remaining 9 apples of the tree. How many apples were on the tree?

Show your work

# Estimate Sums and Differences

Round each number to the nearest hundred. Then estimate.

$$620 - 250$$

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$$750 + 238$$

$$750 \text{ rounds to } 800$$

$$238 \text{ rounds to } \frac{200}{1000}$$

$$750 + 238 \text{ is about } 1000$$

$$833 + 121$$

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$$\begin{array}{r} 5,264 \\ + 2,613 \\ \hline \end{array}$$

$$941 - 502$$

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$$\begin{array}{r} 3,449 \\ + 5,287 \\ \hline \end{array}$$

Round each number to the nearest ten. Then estimate.

$$\begin{array}{r} 5,328 \\ - 784 \\ \hline \end{array}$$

$$\begin{array}{r} 61,358 \\ + 9,513 \\ \hline \end{array}$$

$$\begin{array}{r} 942 \\ + 368 \\ \hline \end{array}$$

Think

Nasser listened to three CDs. The first one was 62 minutes long. The second one was 48 minutes long. The third one was 73 minutes long. About how many total minutes of music did Nasser listen to?

(Round your answer to the nearest ten).

Show your work