Grade 4 Unit 1 worksheet: Numbers to one million (answer key)

ANSWERS AT A GLANCE

1. (a) 603,049 (b) 20,507 (c) 180,900 (d) 406,002 (e) 78,031 (f) 500,005
2. (a) 6,000 (b) 10 (c) 500,000 (d) 60 (e) 5,000
3. (a) 700,009 (b) 50,200 (c) 306,011 (d) 99,090
4. (a) four hundred fifty thousand, nineteen (b) eighty-six thousand, three hundred (c) seven hundred two thousand, forty
5. (a) The digit 2; it is worth 20,000. (b) 300,000 + 20,000 + 5,000 + 200 + 80 + 8
6. 49,306 cans

WORKED SOLUTIONS

1. Write each number in standard form. The parts are not in order, so look at what each part is worth.

(a) 40 + 600,000 + 9 + 3,000

(b) 7 + 20,000 + 500

(c) 900 + 80,000 + 100,000

(d) 6,000 + 400,000 + 2

(e) 30 + 70,000 + 8,000 + 1

(f) 500,000 + 5

ANSWER

(a) 603,049 (b) 20,507 (c) 180,900 (d) 406,002 (e) 78,031 (f) 500,005

SOLUTION

Put each part in its place, largest first, and write 0 in every place no part fills.

(a) 600,000 + 3,000 + 40 + 9: 6 hundred thousands, 0 ten thousands, 3 thousands, 0 hundreds, 4 tens, 9 ones, so 603,049.

(b) 20,000 + 500 + 7: 2 ten thousands, 0 thousands, 5 hundreds, 0 tens, 7 ones, so 20,507.

(c) 100,000 + 80,000 + 900: 1, 8, 0, 9, 0, 0, so 180,900.

(d) 400,000 + 6,000 + 2: 4, 0, 6, 0, 0, 2, so 406,002.

(e) 70,000 + 8,000 + 30 + 1: 7 ten thousands, 8 thousands, 0 hundreds, 3 tens, 1 one, so 78,031.

(f) 500,000 + 5: 5 hundred thousands and 5 ones, with zeros in the four places between, so 500,005.

2. Write the number that goes in each box.

(a) 306,450 = 300,000 + ☐ + 400 + 50

(b) 82,017 = 80,000 + 2,000 + ☐ + 7

(c) 540,903 = ☐ + 40,000 + 900 + 3

(d) 719,060 = 700,000 + 10,000 + 9,000 + ☐

(e) 905,008 = 900,000 + ☐ + 8

ANSWER

(a) 6,000 (b) 10 (c) 500,000 (d) 60 (e) 5,000

SOLUTION

Find the digit the given parts leave out, and write what it is worth.

(a) In 306,450 the 6 is in the thousands place, and no part shows it: 6,000.

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(b) In 82,017 the 1 is in the tens place: 10.

(c) In 540,903 the 5 is in the hundred thousands place: 500,000.

(d) In 719,060 the 6 is in the tens place: 60.

(e) In 905,008 the 5 is in the thousands place: 5,000. The zeros add nothing, so they need no part.

3. Write each number in standard form. Watch for places the words skip.

(a) seven hundred thousand, nine

(b) fifty thousand, two hundred

(c) three hundred six thousand, eleven

(d) ninety-nine thousand, ninety

ANSWER

(a) 700,009 (b) 50,200 (c) 306,011 (d) 99,090

SOLUTION

Write the thousands period from the words before "thousand", then the ones period with exactly three digits.

(a) Seven hundred is 700; nine is 009. So 700,009.

(b) Fifty is 50; two hundred is 200. So 50,200.

(c) Three hundred six is 306; eleven is 011. So 306,011.

(d) Ninety-nine is 99; ninety is 090. So 99,090.

4. Write each number in word form.

(a) 450,019

(b) 86,300

(c) 702,040

ANSWER

(a) four hundred fifty thousand, nineteen (b) eighty-six thousand, three hundred (c) seven hundred two thousand, forty

SOLUTION

Read the thousands period as a three-digit number and say "thousand". Then read the ones period. Never say "and".

(a) 450 is four hundred fifty; 019 is nineteen. So four hundred fifty thousand, nineteen.

(b) 86 is eighty-six; 300 is three hundred. So eighty-six thousand, three hundred.

(c) 702 is seven hundred two; 040 is forty. So seven hundred two thousand, forty.

5. The city library has 325,288 books.

(a) Which digit is in the ten thousands place, and what is it worth?

(b) Write 325,288 in expanded form.

ANSWER

(a) The digit 2; it is worth 20,000. (b) 300,000 + 20,000 + 5,000 + 200 + 80 + 8

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SOLUTION

Read the digits from the right: ones 8, tens 8, hundreds 2, thousands 5, ten thousands 2, hundred thousands 3.

(a) The ten thousands digit is 2. Its value is 2 times 10,000, which is 20,000.

(b) Write each digit's value and add them:

$$325{,}288 = 300{,}000 + 20{,}000 + 5{,}000 + 200 + 80 + 8$$

6. A school recycling drive counts its cans in truckloads of 10,000, crates of 1,000 and bags of 100. So far it has 3 truckloads, 19 crates, 3 bags and 6 loose cans. How many cans is that? Write the number in standard form.

ANSWER

49,306 cans

SOLUTION

The crates hold 19 thousands, too many for one place. Ten thousands make one ten thousand, so 19 thousands is 1 ten thousand and 9 thousands.

Now each place has one digit: 4 ten thousands, 9 thousands, 3 hundreds, 0 tens and 6 ones. The number is 49,306.

Check: 30,000 + 19,000 + 300 + 6 = 49,306.

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