

Chapter 1: Numbers to 10 Million

Section A: Multiple-Choice Questions

Choose the correct answer.

1. Which numeral represents two million, forty-three thousand, six hundred and eight?
 - (1) 2 403 608
 - (2) 2 043 608
 - (3) 2 043 068
 - (4) 2 430 608

2. How is 7 005 090 written in words?
 - (1) Seven million, five hundred thousand and ninety
 - (2) Seven million, fifty thousand and ninety
 - (3) Seven million, five thousand and ninety
 - (4) Seven million, five hundred and ninety

3. Which digit is in the hundred thousands place in 4 836 219?
 - (1) 3
 - (2) 4
 - (3) 8
 - (4) 6

4. What is the value of the digit 7 in 5 072 641?
 - (1) 7 000
 - (2) 70 000
 - (3) 700 000
 - (4) 7 000 000

5. Which is the expanded form of 6 305 084?
 - (1) 6 000 000 + 300 000 + 5 000 + 80 + 4
 - (2) 6 000 000 + 30 000 + 5 000 + 800 + 4
 - (3) 6 000 000 + 300 000 + 50 000 + 80 + 4
 - (4) 6 000 000 + 300 000 + 5 000 + 800 + 40

6. What is the value of 40 hundred thousands?
 - (1) 400 000
 - (2) 4 000 000
 - (3) 40 000 000
 - (4) 400 000 000

7. Which numeral represents nine million and seventy-five?

- (1) 9 000 075
- (2) 9 000 750
- (3) 9 075 000
- (4) 9 750 000

8. Fill in the blank with the correct symbol.

3 908 415 ____ 3 890 451

- (1) <
- (2) >
- (3) =
- (4) It is not possible to tell.

9. Which shows the numbers in ascending order?

5 070 600, 5 007 600, 5 700 060, 5 070 060

- (1) 5 007 600, 5 070 060, 5 070 600, 5 700 060
- (2) 5 007 600, 5 070 600, 5 070 060, 5 700 060
- (3) 5 700 060, 5 070 600, 5 070 060, 5 007 600
- (4) 5 070 060, 5 007 600, 5 070 600, 5 700 060

10. Compare the following quantities.

52 hundred thousands ____ 5 million and 20 ten thousands

- (1) <
- (2) >
- (3) =
- (4) It is not possible to tell.

11.



What number does A represent?

- (1) 4 200 000
- (2) 4 400 000
- (3) 4 500 000
- (4) 4 600 000

12. Use all the digits 0, 2, 3, 5, 5, 8 and 9 once each. What is the greatest number that can be formed?

- (1) 9 855 320
- (2) 9 853 520
- (3) 9 855 302
- (4) 9 835 520

13. Use all the digits 0, 0, 1, 4, 6, 7 and 9 once each. What is the smallest 7-digit number that can be formed?

- (1) 1 004 679
- (2) 1 040 679
- (3) 1 046 079
- (4) 1 400 679

14. Use all the digits 0, 1, 2, 4, 5, 7 and 9 once each. What is the greatest even number that can be formed?

- (1) 9 754 210
- (2) 9 754 120
- (3) 9 752 410
- (4) 9 751 240

15. What is the greatest possible digit that can be placed in the box?

$$6\,4\boxed{2}\,718 < 6\,452\,718$$

- (1) 3
- (2) 4
- (3) 5
- (4) 6

16. A number has the following properties:

- Its millions digit is 6.
- Its hundred thousands digit is 4.
- Its ten thousands digit is twice its thousands digit.
- Its thousands digit is 3.
- Its last three digits are 205.

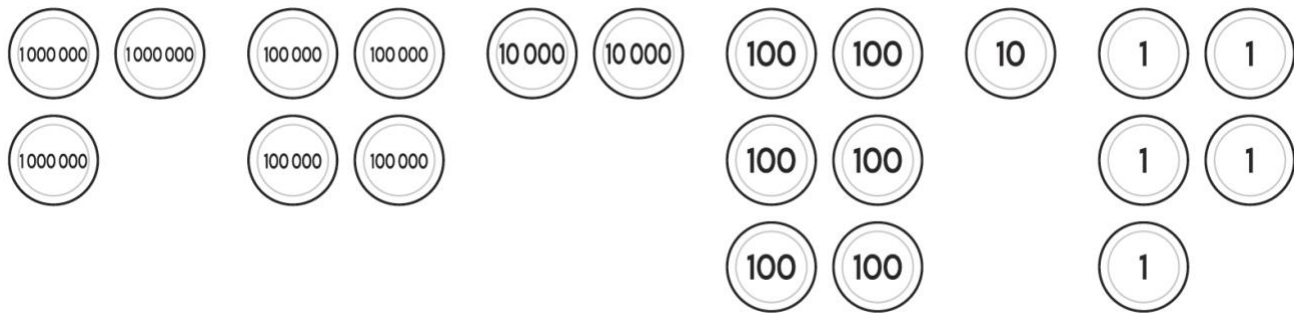
What is the number?

- (1) 6 436 205
- (2) 6 463 205
- (3) 6 433 205
- (4) 6 466 205

17. Which statement about 7 050 406 is false?

- (1) The digit 5 has a value of 50 000.
- (2) The digit 4 is in the hundreds place.
- (3) Its expanded form is $7\,000\,000 + 50\,000 + 400 + 6$.
- (4) The number contains 5 thousands.

18.



What number is represented?

- (1) 3 402 615
- (2) 3 420 615
- (3) 3 426 015
- (4) 3 462 105

19. Use all the digits 0, 2, 4, 5, 7, 9 and 9 once each. The number formed:

- has 9 in the millions place;
- has 2 in the hundred thousands place;
- has 0 in the thousands place; and
- is divisible by 5.

Which number satisfies all the conditions?

- (1) 9 270 495
- (2) 9 274 095
- (3) 9 275 490
- (4) 9 720 495

20. A number is formed using all the digits 0, 2, 3, 4, 5, 7 and 9 once each. The number:

- is between 5 000 000 and 6 000 000;
- has 2 in the thousands place;
- has 0 in the tens place;
- is odd; and
- is as great as possible.

What is the number?

- (1) 5 972 403
- (2) 5 974 203
- (3) 5 942 703
- (4) 5 792 403

Section B: Short Structured Questions

21. Write each number in numerals.

- (a) Six hundred and forty-two thousand and seventeen
- (b) One million, four thousand and ninety
- (c) Five million, six hundred and eighty thousand, three hundred and four
- (d) Ten million

22. Write each number in words.

- (a) 408 506
- (b) 2 030 070
- (c) 6 704 009
- (d) 9 999 999

23. Study the number 8 305 742. For each digit, state its place and its value.

- (a) 8
- (b) 3
- (c) 0
- (d) 5
- (e) 7
- (f) 4
- (g) 2

24. Write each number in expanded form.

- (a) 503 080
- (b) 1 406 205
- (c) 7 030 040
- (d) 9 999 999

25. Write each expanded form as a numeral.

- (a) $800\,000 + 20\,000 + 5\,000 + 600 + 4$
- (b) $2\,000\,000 + 300\,000 + 70\,000 + 900 + 50 + 8$
- (c) $6\,000\,000 + 4\,000 + 20 + 1$
- (d) $9\,000\,000 + 800\,000 + 10\,000 + 7$

26. Fill in the blanks.

- (a) 7 hundred thousands = _____ ten thousands
- (b) 3 million = _____ hundred thousands
- (c) 450 ten thousands = _____
- (d) 2 600 thousands = _____
- (e) 9 million = _____ thousands
- (f) 80 hundred thousands = _____ million

27. Complete the place-value chart for 6 204 053.

Millions: _____

Hundred thousands: _____

Ten thousands: _____

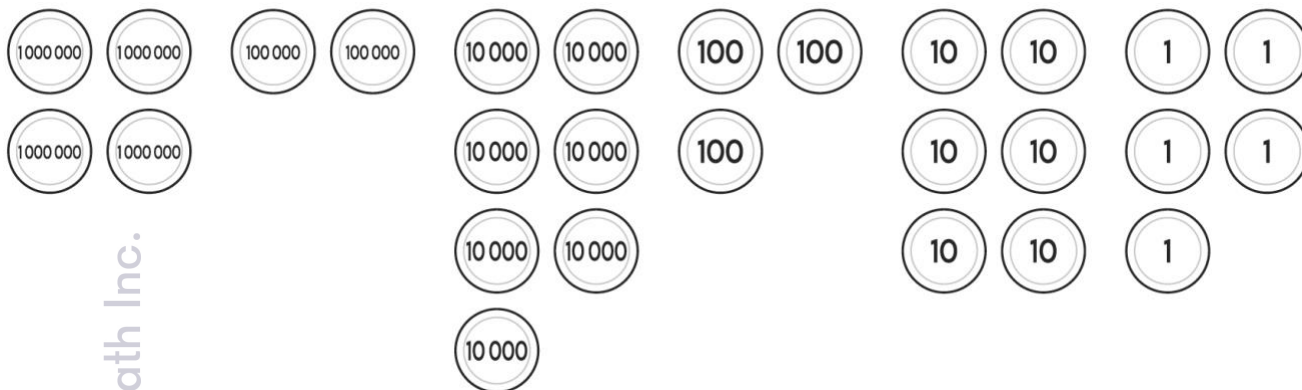
Thousands: _____

Hundreds: _____

Tens: _____

Ones: _____

28.



(a) Write the represented number in numerals.

(b) Write the number in words.

(c) Write the number in expanded form.

29. Six place-value cards show 6 000 000, 400 000, 8 000, 900, 20 and 1.

(a) Write the number formed in numerals.

(b) Write it in words.

(c) Which place has no card?

30. Match each expanded form to the correct numeral.

I 3 050 406

II 3 504 060

III 3 540 006

(a) $3\ 000\ 000 + 50\ 000 + 400 + 6$

(b) $3\ 000\ 000 + 500\ 000 + 4\ 000 + 60$

(c) $3\ 000\ 000 + 500\ 000 + 40\ 000 + 6$

31. Fill in each blank with $<$, $>$ or $=$.

- (a) 4 506 702 ____ 4 560 207
- (b) 7 090 300 ____ 7 009 300
- (c) 5 400 080 ____ 54 hundred thousands and 8 tens
- (d) 2 million and 35 thousands ____ 2 035 thousands
- (e) 9 999 999 ____ 10 000 000
- (f) 6 070 400 ____ 6 007 400

32. Arrange each set of numbers in ascending order.

- (a) 2 605 040, 2 650 004, 2 506 400, 2 650 040
- (b) 8 080 008, 8 008 080, 8 800 008, 8 080 080

33. Arrange each set of numbers in descending order.

- (a) 3 401 900, 3 410 090, 3 409 100, 3 490 010
- (b) 9 000 909, 9 009 009, 9 090 009, 9 000 099

34. Compare 6 407 215 and 6 470 125.

- (a) At which place do the two numbers first differ?
- (b) Which number is greater?
- (c) Explain how the digit in that place helps you compare the numbers.

35. Each statement contains an error. Correct it.

- (a) 4 060 208 is read as "Four million, six hundred thousand, two hundred and eight."
- (b) "Seven million, nine thousand and forty" is written as 7 090 040.
- (c) $5\,400\,030 = 5\,000\,000 + 400\,000 + 3\,000$.
- (d) In 2 005 006, the digit 5 is in the ten thousands place.

36. State the value of every occurrence of the specified digit.

- (a) The digit 5 in 5 505 050
- (b) The digit 8 in 8 080 808

37. Change exactly one digit in each number.

- (a) Make 3 407 215 as great as possible.
- (b) Make 6 809 432 as small as possible while keeping it a 7-digit number.
- (c) Make 4 763 210 as great as possible while keeping it below 5 000 000.

38. Find the required digit.

- (a) What is the smallest possible digit for $\square$? $4\,7\square5\,900 > 4\,765\,900$
- (b) What is the greatest possible digit for $\square$? $8\,\square04\,120 < 8\,304\,120$
- (c) What is the greatest possible digit for $\square$? $6\,49\square\,999 < 6\,495\,000$
- (d) What is the smallest possible digit for $\square$? $2\,\square99\,999 > 2\,699\,999$

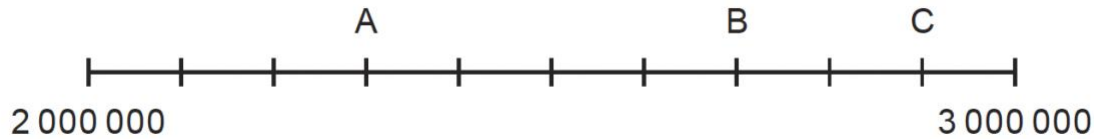
39. List all the possible digits that can be placed in each box.

(a) $5\ 324\ 210 \leq 5\ 3\square4\ 210 \leq 5\ 364\ 210$

(b) $7\ 650\ 000 < 7\ \square50\ 000 < 7\ 950\ 000$

(c) $4\ 829\ 100 < 4\ 8\square9\ 100 < 4\ 859\ 100$

40.



(a) What is the value of each interval?

(b) State the values of A, B and C.

(c) Write the value represented by B in words.

41. Use all the digits 0, 2, 2, 4, 5, 7 and 8 once each to form:

(a) the greatest possible number;

(b) the smallest possible 7-digit number;

(c) the greatest possible number less than 5 000 000;

(d) the smallest possible number greater than 5 000 000.

42. Use all the digits 0, 1, 3, 4, 6, 8 and 9 once each to form:

(a) the greatest even number;

(b) the smallest even number.

43. Use all the digits 0, 1, 2, 4, 5, 7 and 9 once each to form:

(a) the greatest number less than 5 000 000;

(b) the smallest number greater than 5 000 000;

(c) Compare your answers using $<$ or $>$. At which place do they first differ?

44. A number has the form 6AB0005. The digits A and B are selected from 2, 4 and 8 without repetition. List all the possible numbers in ascending order.

45. All the digits in a number are different.

- The millions digit is 5.
- The thousands digit is 4.
- The hundred thousands digit is 3 more than the thousands digit.
- The ten thousands digit is 0.
- The ones digit is 3.
- The hundreds digit is twice the ones digit.
- The tens digit is 1.

Find the number.

46. Explain and correct each error.

- (a) Mei says that the value of 8 in 7 081 204 is 800 000.
- (b) Arif reads 5 006 070 as "Five million, sixty thousand and seventy."
- (c) Nina says that 70 hundred thousands is 700 000.
- (d) Tom uses the digits 0, 2, 4, 5, 8, 9 and 9 to form the smallest 7-digit number. He writes 0 245 899.

47. State whether each statement is true or false.

- (a) One million is a 7-digit number.
- (b) Ten million is the greatest 7-digit number.
- (c) A zero in the ten thousands place has a value of zero.
- (d) 70 hundred thousands is equal to 7 million.
- (e) The number 6 040 005 contains 4 ten thousands.
- (f) 9 999 999 is one less than 10 000 000.

48. Write two different 7-digit numbers in which the digit 6 has a value of 600 000 and the digit 4 has a value of 4 000.

- (a) One number must be greater than 7 000 000.
- (b) The other number must be less than 7 000 000.

49. Write one possible number for each set of conditions.

- (a) The number is between 4 200 000 and 4 300 000. It has 7 in the ten thousands place and 5 in the hundreds place.
- (b) The number is less than 8 000 000. The digit 8 has a value of 800 000, the thousands digit is 0 and the number is odd.

50. Answer each question.

- (a) Swap the digits 2 and 8 in 2 846 105. Write the new number and compare it with the original number.
- (b) Swap the digits 1 and 6 in 7 310 468. Write the new number and compare it with the original number.
- (c) Which two digits should be swapped in 5 204 781 to make the greatest possible number? State the new number.

51. Find the greatest 7-digit number less than 6 500 000 whose digits are all different.

52. Find the smallest 7-digit number greater than 2 300 000 whose digits are all different.

53. Use all the digits 0, 2, 3, 4, 5, 7 and 9 once each. The millions digit must be 5.

- (a) Form the greatest possible number.
- (b) Form the smallest possible number.

54. The following serial numbers are shown.

P: 5 040 307

Q: 5 403 070

R: 5 004 370

S: 5 430 007

- (a) Arrange the serial numbers in ascending order.
- (b) Which serial numbers have 3 in the hundreds place?
- (c) In which serial numbers does the digit 4 have a value of 400 000?

55. Study the following numbers.

4 005 090

4 050 009

4 500 090

- (a) Write each number in words.
- (b) State the value of the digit 5 in each number.
- (c) Arrange the numbers in ascending order.

56. The number 7 354 086 is represented using place-value cards.

- (a) What is the value of the card representing the digit 5?
- (b) What is the value of the card representing the digit 4?
- (c) Which place contains zero?

57. State whether each statement is always true, sometimes true or never true.

- (a) Every 7-digit number is greater than every 6-digit number.
- (b) A number containing more zero digits is smaller.
- (c) Rearranging the digits of a number makes the number greater.
- (d) Give examples to support your answers for statements that are sometimes true.

58. Use all the digits 0, 1, 2, 3, 6, 8 and 9 once each.

- (a) Form the greatest possible number below 7 000 000.
- (b) Form the smallest possible number above 8 000 000.
- (c) Explain why no number between 7 000 000 and 8 000 000 can be formed using all the digits.

59. Use all the digits 0, 2, 4, 5, 7, 9 and 9 once each. The number formed:

- has 9 in the millions place;
 - has 2 in the hundred thousands place;
 - has 0 in the thousands place; and
 - is divisible by 5.
- (a) List all the possible numbers in ascending order.
 - (b) How many possible numbers are there?
 - (c) State the smallest and greatest possible numbers.

60. Seven numeral cards show 0, 1, 2, 3, 4, 5 and 6. A number is formed using every card once. It:

- is between 4 500 000 and 4 600 000;
 - has 2 in the hundreds place;
 - has 0 in the tens place; and
 - is odd.
- (a) List all the possible numbers in ascending order.
(b) How many possible numbers are there?
(c) State the smallest and greatest possible numbers.

Section C: Longer and Multipart Questions

61. A digital library contains the following numbers of books.

Fiction: 2 406 750

Non-fiction: 1 980 405

Children's books: 3 004 090

Reference books: 608 755

- (a) Write the number of children's books in words.
(b) Arrange the four categories in ascending order of the number of books.
(c) In which category does the digit 8 have a value of 80 000?

62. Three cheques show the following amounts.

Cheque A: \$4 080 306

Cheque B: Nine million, five thousand and seventy dollars

Cheque C: \$2 000 000 + \$700 000 + \$6 000 + \$40 + \$5

- (a) Write all three amounts in numerals.
(b) Write all three amounts in words.
(c) Arrange the cheques in descending order of amount.

63. Four sections of a digital archive contain the following numbers of records.

Section A contains 1 250 000 records.

Section B contains 14 hundred thousands and 5 ten thousands records.

Section C contains 1 405 thousands records.

Section D contains one million, four hundred and fifty thousand and five records.

- (a) Write the numbers of records in Sections B, C and D in numerals.
(b) Arrange the sections in descending order of records.
(c) Which section has zero hundreds and zero tens, but 5 ones?

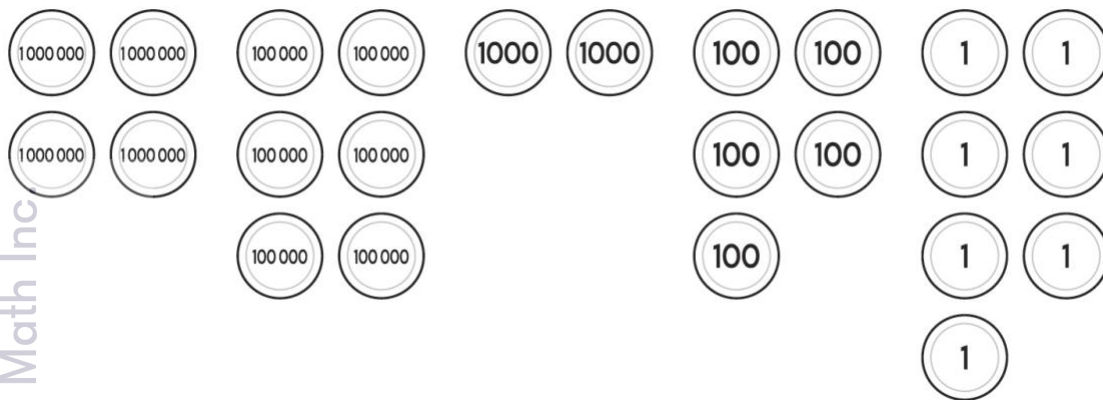
64.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
7	0	3	5	0	8	2

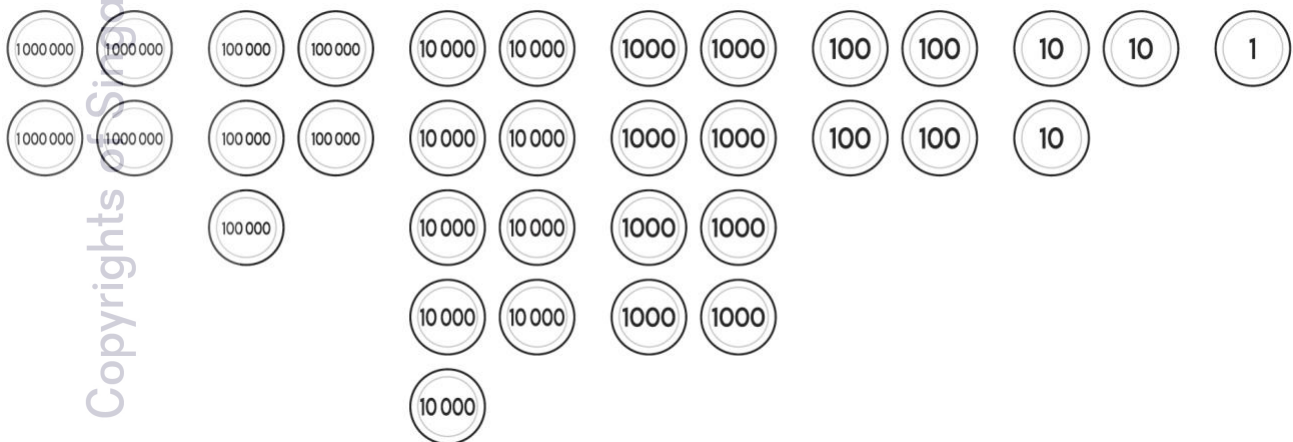
- Write the number in numerals.
- Write it in words.
- Write it in expanded form.

65.

Set A



Set B



- Write each number in numerals.
- Compare the numbers using $<$ or $>$.
- At which place do the two numbers first differ? Explain how this helps you compare them.

66. Four students make statements about 8 070 006.

Ali: "It is read as eight million, seventy thousand and six."

Bella: "The digit 7 has a value of 700 000."

Chen: "Its expanded form is $8\,000\,000 + 70\,000 + 6$."

Devi: "The number is the same as 8 700 006."

- Which students are correct?
- Correct each incorrect statement.
- Explain why the zero digits in 8 070 006 are important.

67. Seven numeral cards show 0, 1, 2, 4, 6, 7 and 9. Using every card once, form:

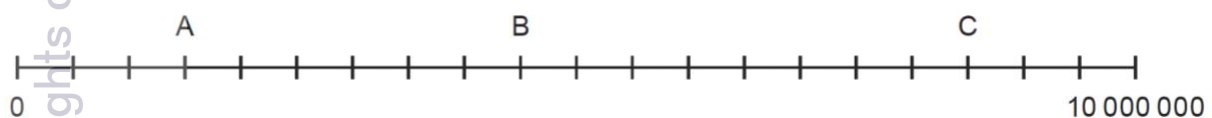
- the greatest and smallest possible numbers;
- the greatest even number and smallest odd number;
- the greatest possible number below 5 000 000 and the smallest possible number above 5 000 000.

68. A hidden 7-digit number has the following properties:

- It is between 3 500 000 and 3 600 000.
- Its ten thousands digit is twice its thousands digit.
- Its thousands digit is 4.
- Its tens digit is 6.
- Its hundreds digit is one less than its tens digit.
- Its ones digit is 9.

- Find the number.
- Write it in expanded form.
- State the value of each occurrence of the digit 5.

69.



- What is the value of each interval?
- State the values represented by A, B and C.
- Write the number represented by B in words.

70. The populations of four cities are shown below.

City A: 2 809 450

City B: 2 890 405

City C: 2 098 540

City D: 2 980 045

- Arrange the cities in ascending order of population.
- Write the greatest population in words.
- State the value of the digit 8 in each population in which it appears.

71. A museum uses 7-digit ticket codes of the form 5AB00C5. The digits A, B and C are selected from 1, 2 and 3. No digit may be repeated.

- (a) List all the possible ticket codes in ascending order.
- (b) How many different ticket codes can be formed?
- (c) State the smallest and greatest possible ticket codes.

72. Use all the numeral cards 0, 1, 3, 4, 5, 7 and 8 once each.

- (a) Form the greatest possible number below 6 000 000.
- (b) Form the smallest possible number above 6 000 000.
- (c) Write both numbers in words.

73. A hidden 7-digit number has the following properties:

- It is between 4 000 000 and 5 000 000.
 - Its hundred thousands digit is twice its ten thousands digit.
 - Its ten thousands digit is 3.
 - Its thousands digit is 0.
 - Its hundreds digit is one less than its millions digit.
 - Its tens digit is 2.
 - Its ones digit is 5.
- (a) Find the number.
 - (b) Write the number in words.
 - (c) Write the number in expanded form.

74. Seven numeral cards show 0, 0, 2, 4, 6, 7 and 9.

- (a) Form the smallest possible 7-digit number.
- (b) Form the greatest possible even number.
- (c) Is the number in part (a) odd or even? Explain how the positions of the zero digits help make it as small as possible.

75. A student copies the number 7 030 405 but leaves out the zero placeholders and writes 7 34 5.

- (a) Write the digits of 7 030 405 in a place-value chart from millions to ones.
- (b) Write 7 030 405 in words.
- (c) Explain why the zero digits cannot simply be omitted.

76. Three archive sections contain the following numbers of records.

Section P: 38 hundred thousands and 45 ones

Section Q: 3 805 thousands

Section R: Three million, eighty thousand, four hundred and five

- (a) Write all three numbers in numerals.
- (b) Arrange the sections in ascending order of records.
- (c) State the value of the digit 8 in each number.

77. A museum uses ticket codes of the form 7AB0C05. The digits A, B and C are selected from 2, 4 and 8 without repetition.

- (a) List all the possible ticket codes in ascending order.
- (b) How many different ticket codes can be formed?
- (c) Which ticket codes have the digit 4 with a value of 40 000?

78. Seven numeral cards show 0, 1, 2, 3, 5, 7 and 8. A number is formed using every card once. It:

- is between 3 500 000 and 3 600 000;
 - has 2 in the thousands place;
 - has 0 in the tens place; and
 - is odd.
- (a) List all the possible numbers in ascending order.
 - (b) How many possible numbers are there?
 - (c) State the smallest and greatest possible numbers.

79. Seven numeral cards show 0, 1, 2, 4, 6, 7 and 9. A number is formed using every card once. It:

- is greater than 6 900 000 but less than 7 000 000;
 - is odd;
 - has 4 in the thousands place; and
 - has 0 in the hundreds place.
- A student claims that only one number satisfies the conditions.
- (a) List all the possible numbers in ascending order.
 - (b) Is the student's claim correct?
 - (c) Explain how you know that you have found every possible number.

80. A 7-digit number has the following properties:

- All its digits are different.
 - Its millions digit is 8.
 - Its hundred thousands digit is 5.
 - Its ten thousands digit is twice its thousands digit.
 - Its thousands digit is 3.
 - Its hundreds digit is 2 more than its tens digit.
 - Its tens digit is 2.
 - Its ones digit is 0.
- (a) Find the number.
 - (b) Using the same digits, form the greatest possible number below 8 000 000.
 - (c) Using the same digits, form the smallest possible number above 8 000 000.

Answers

Section A: Multiple-Choice Questions

1. (2)
2. (3)
3. (3)
4. (2)
5. (1)
6. (2)
7. (1)
8. (2)
9. (1)
10. (3)
11. (2)
12. (1)
13. (1)
14. (1)
15. (2)
16. (2)
17. (4)
18. (2)
19. (1)
20. (1)

Section B: Short Structured Questions

21. (a) 642 017
(b) 1 004 090
(c) 5 680 304
(d) 10 000 000
22. (a) Four hundred and eight thousand, five hundred and six
(b) Two million, thirty thousand and seventy
(c) Six million, seven hundred and four thousand and nine
(d) Nine million, nine hundred and ninety-nine thousand, nine hundred and ninety-nine
23. (a) Millions; 8 000 000
(b) Hundred thousands; 300 000
(c) Ten thousands; 0
(d) Thousands; 5 000

(e) Hundreds; 700

(f) Tens; 40

(g) Ones; 2

24. (a) $500\,000 + 3\,000 + 80$

(b) $1\,000\,000 + 400\,000 + 6\,000 + 200 + 5$

(c) $7\,000\,000 + 30\,000 + 40$

(d) $9\,000\,000 + 900\,000 + 90\,000 + 9\,000 + 900 + 90 + 9$

25. (a) 825 604

(b) 2 370 958

(c) 6 004 021

(d) 9 810 007

26. (a) 70

(b) 30

(c) 4 500 000

(d) 2 600 000

(e) 9 000

(f) 8

27. 6, 2, 0, 4, 0, 5, 3

28. (a) 4 270 365

(b) Four million, two hundred and seventy thousand, three hundred and sixty-five

(c) $4\,000\,000 + 200\,000 + 70\,000 + 300 + 60 + 5$

29. (a) 6 408 921

(b) Six million, four hundred and eight thousand, nine hundred and twenty-one

(c) Ten thousands place

30. (a) I

(b) II

(c) III

31. (a) $<$

(b) $>$

(c) $=$

(d) $=$

(e) $<$

(f) $>$

32. (a) 2 506 400, 2 605 040, 2 650 004, 2 650 040

(b) 8 008 080, 8 080 008, 8 080 080, 8 800 008

33. (a) 3 490 010, 3 410 090, 3 409 100, 3 401 900

(b) 9 090 009, 9 009 009, 9 000 909, 9 000 099

34. (a) Ten thousands place

(b) 6 470 125

(c) Seven ten thousands is greater than zero ten thousands.

35. (a) Four million, sixty thousand, two hundred and eight

(b) 7 009 040

- (c) $5\,000\,000 + 400\,000 + 30$
(d) The digit 5 is in the thousands place.

36. (a) 5 000 000, 500 000, 5 000, 50
(b) 8 000 000, 80 000, 800, 8

37. (a) 9 407 215
(b) 1 809 432
(c) 4 963 210

38. (a) 7
(b) 2
(c) 4
(d) 7

39. (a) 2, 3, 4, 5, 6
(b) 7, 8
(c) 3, 4

40. (a) 100 000
(b) $A = 2\,300\,000$; $B = 2\,700\,000$; $C = 2\,900\,000$
(c) Two million, seven hundred thousand

41. (a) 8 754 220
(b) 2 024 578
(c) 4 875 220
(d) 5 022 478

42. (a) 9 864 310
(b) 1 034 698

43. (a) 4 975 210
(b) 5 012 479
(c) $4\,975\,210 < 5\,012\,479$; millions place

44. 6 240 005, 6 280 005, 6 420 005, 6 480 005, 6 820 005, 6 840 005

45. 5 704 613

46. (a) 80 000
(b) Five million, six thousand and seventy
(c) 7 000 000
(d) 2 045 899

47. (a) True
(b) False
(c) True
(d) True
(e) True
(f) True

48. Possible answers:
(a) 7 604 000
(b) 5 604 000

49. Possible answers:

- (a) 4 270 500
- (b) 7 850 003

50. (a) 8 246 105; $8\,246\,105 > 2\,846\,105$
(b) 7 360 418; $7\,360\,418 > 7\,310\,468$
(c) Swap 5 and 8; 8 204 751

51. 6 498 753

52. 2 301 456

53. (a) 5 974 320
(b) 5 023 479

54. (a) R, P, Q, S
(b) P and R
(c) Q and S

55. (a) Four million, five thousand and ninety; four million, fifty thousand and nine; four million, five hundred thousand and ninety
(b) 5 000; 50 000; 500 000
(c) 4 005 090, 4 050 009, 4 500 090

56. (a) 50 000
(b) 4 000
(c) Hundreds place

57. (a) Always true
(b) Sometimes true
(c) Sometimes true
(d) Answers will vary.

58. (a) 6 983 210
(b) 8 012 369
(c) A number in that interval must have 7 in the millions place, but there is no digit 7.

59. (a) 9 240 795, 9 240 975, 9 270 495, 9 270 945, 9 290 475, 9 290 745
(b) 6
(c) 9 240 795; 9 290 745

60. (a) 4 516 203, 4 536 201, 4 561 203, 4 563 201
(b) 4
(c) 4 516 203; 4 563 201

Section C: Longer and Multipart Questions

61. (a) Three million, four thousand and ninety
(b) Reference books, Non-fiction, Fiction, Children's books
(c) Non-fiction

62. (a) A: 4 080 306; B: 9 005 070; C: 2 706 045
(b) Four million, eighty thousand, three hundred and six dollars; nine million, five thousand and seventy dollars; two million, seven hundred and six thousand and forty-five dollars
(c) B, A, C

63. (a) B = 1 450 000; C = 1 405 000; D = 1 450 005
 (b) D, B, C, A
 (c) Section D
64. (a) 7 035 082
 (b) Seven million, thirty-five thousand and eighty-two
 (c) $7\,000\,000 + 30\,000 + 5\,000 + 80 + 2$
65. (a) A = 4 602 507; B = 4 598 431
 (b) $A > B$
 (c) Hundred thousands place; 6 hundred thousands is greater than 5 hundred thousands.
66. (a) Ali and Chen
 (b) Bella: The digit 7 has a value of 70 000. Devi: 8 070 006 is not equal to 8 700 006.
 (c) The zeros hold empty places so that the other digits retain their correct values.
67. (a) 9 764 210; 1 024 679
 (b) 9 764 210; 1 024 679
 (c) 4 976 210; 6 012 479
68. (a) 3 584 569
 (b) $3\,000\,000 + 500\,000 + 80\,000 + 4\,000 + 500 + 60 + 9$
 (c) 500 000 and 500
69. (a) 500 000
 (b) A = 1 500 000; B = 4 500 000; C = 8 500 000
 (c) Four million, five hundred thousand
70. (a) City C, City A, City B, City D
 (b) Two million, nine hundred and eighty thousand and forty-five
 (c) City A: 800 000; City B: 800 000; City C: 8 000; City D: 80 000
71. (a) 5 120 035, 5 130 025, 5 210 035, 5 230 015, 5 310 025, 5 320 015
 (b) 6
 (c) 5 120 035; 5 320 015
72. (a) 5 874 310
 (b) 7 013 458
 (c) Five million, eight hundred and seventy-four thousand, three hundred and ten; seven million, thirteen thousand, four hundred and fifty-eight
73. (a) 4 630 325
 (b) Four million, six hundred and thirty thousand, three hundred and twenty-five
 (c) $4\,000\,000 + 600\,000 + 30\,000 + 300 + 20 + 5$
74. (a) 2 004 679
 (b) 9 764 200
 (c) Odd. A 7-digit number cannot begin with 0, so 2 is placed first and the two zeros are placed in the next two greatest available places.
75. (a) Millions 7; hundred thousands 0; ten thousands 3; thousands 0; hundreds 4; tens 0; ones 5
 (b) Seven million, thirty thousand, four hundred and five
 (c) The zeros show that there are no hundred thousands, thousands or tens. Omitting them changes the places and values of the other digits.

- 76.** (a) $P = 3\,800\,045$; $Q = 3\,805\,000$; $R = 3\,080\,405$
(b) R, P, Q
(c) P: 800 000; Q: 800 000; R: 80 000
- 77.** (a) 7 240 805, 7 280 405, 7 420 805, 7 480 205, 7 820 405, 7 840 205
(b) 6
(c) 7 240 805 and 7 840 205
- 78.** (a) 3 512 807, 3 572 801, 3 582 107, 3 582 701
(b) 4
(c) 3 512 807; 3 582 701
- 79.** (a) 6 914 027, 6 924 017, 6 924 071, 6 974 021
(b) No
(c) The millions and hundred thousands digits must be 6 and 9. After fixing 4 in the thousands place and 0 in the hundreds place, arrange the remaining digits systematically, placing an odd digit in the ones place.
- 80.** (a) 8 563 420
(b) 6 854 320
(c) 8 023 456

