

**Question 1:** Write the place value of the digit that has been underlined

1) 725      *units*

2) 7,823      *units*

3) 199      *units*

4) 11,717,555      *tens of thousands*

5) 9,053,496      *hundreds*

6) 709,758,968      *Tens of thousands*

7) 105,016      *Thousands*

8) 43,105      *Tens*

6 State whether each of these statements is true or false.

a  $5 > 4$       *True*

b  $6 = 10$       *False*

c  $9 \neq 99$       *True*

d  $1 < 12$       *True*

e  $22 \leq 11$       *False*

f  $126 \leq 126$       *True*

g  $19 \geq 20$       *false*

h  $138 > 137$       *True*

i  $13 = 1 + 3$       *False*

j  $15 + 7 = 22 + 5$       *False*

k  $16 - 8 = 8 - 16$       *False*

l  $10 = 1 + 2 + 3 + 4$       *True*

9 Arrange these numbers from smallest to largest.

a 55, 45, 54, 44

$$44 < 45 < 54 < 55$$

b 729, 29, 92, 927, 279

$$29 < 92 < 279 < 729 < 927$$

c 23, 951, 136, 4

$$4 < 23 < 136 < 951$$

d 435, 453, 534, 345, 543, 354

$$345 < 354 < 435 < 453 < 534 < 543$$

e 12345, 54321, 34512, 31254

$$12345 < 31254 < 34512 < 54321$$

f 1010, 1001, 10001, 1100, 10100

$$1001 < 1010 < 1100 < 10001 < 10100$$

14 It is convenient to write very large numbers in expanded form with index notation. Here is an example.

$$50000000 = 5 \times 10000000 = 5 \times 10^7$$

a Explain why it is convenient to write large numbers in this type of expanded form.

*Because we don't have to write that many zeros.*

b 3200 can also be written in the form  $32 \times 10^2$ . All the non-zero digits are written down and then multiplied by a power of 10. Similarly, write each of these numbers in the same way.

i 4100

ii 370000

iii 21770000

$$4100 = 41 \times 100$$

$$370,000 = 37 \times 10^4$$

$$\text{so } 4100 = 41 \times 10^2$$

$$21,770,000 = 2177 \times 10^4$$

**Question 1: Write in expanded form**

a  $8562 = \underline{8,000} + \underline{500} + 60 + 2$

b  $9357 = 9000 + \underline{300} + \underline{50} + 7$

c  $3248 = \underline{3,000} + 200 + 40 + \underline{8}$

d  $15\ 389 = 10\ 000 + 5000 + \underline{300} + \underline{80} + \underline{9}$

e  $12\ 437 = \underline{10,000} + 2000 + \underline{400} + \underline{30} + \underline{7}$

f  $73\ 481 = 70\ 000 + 3000 + \underline{400} + \underline{80} + \underline{1}$

g  $45230 = \underline{40,000} + \underline{5,000} + \underline{200} + \underline{30}$

**QUESTION 3** Write the basic numeral for the following.

a  $8000 + 700 + 60 + 5 = \underline{8765}$

b  $10\ 000 + 2000 + 300 + 50 + 7 = \underline{12357}$

c  $70\ 000 + 8000 + 400 + 90 + 6 = \underline{78496}$

d  $90\ 000 + 4000 + 900 + 60 + 2 = \underline{94962}$

e  $500\ 000 + 600 + 30 + 5 = \underline{500635}$

**QUESTION 1** Write the basic numeral for the following.

a  $9000 + 800 + 50 + 6 = \underline{9856}$

b  $20\ 000 + 7000 + 900 + 70 + 2 = \underline{27972}$

c  $80\ 000 + 9000 + 700 + 90 + 5 = \underline{89795}$

d  $90\ 000 + 6000 + 800 + 30 + 8 = \underline{96838}$

e  $300\ 000 + 80\ 000 + 7000 + 900 + 80 + 7 = \underline{387987}$

**QUESTION 2** Write each as a simple numeral.

a 8 thousand + 6 hundred + 7 tens + 8 units = 8678

b 3 ten-thousand + 9 thousand + 5 hundred + 3 tens = 39530

c 6 hundred-thousand + 7 hundred + 5 tens + 2 units = 600752

d 1 million + 1 hundred-thousand + 1 hundred + 1 unit = 1,100,101

e 6 million + 5 hundred-thousand + 3 thousand + 8 tens = 6,503,080