

Basic Operations

Question Paper, Set 01

Time: 1 hour 30 minutes

Maximum marks: 50

Name: _____ Class: _____ Date: _____

1. Answer all 20 questions. The marks for each question are shown in brackets.
2. Show your working for the 2, 3 and 5 mark questions.
3. The key sheet and worked solutions are at the end of this paper.

- | | |
|---|-----------|
| 1. Find (i) $1 + 9$ (ii) $4 - 1$. | [1 mark] |
| 2. Fill in the box and find the sum: $5 + 8 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $4 + \square = 6$. | [1 mark] |
| 4. Find (i) $90 - 2$ (ii) $60 - 7$. | [2 marks] |
| 5. Find $26 - 6$. | [1 mark] |
| 6. Find $12 - 6$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $72 - 8$ by three methods. | [3 marks] |
| 8. Find $90 - 10$. | [1 mark] |
| 9. Find $31 - 18$ by four methods. | [5 marks] |
| 10. Find (i) $240 - 7$ (ii) $464 - 41$. | [2 marks] |
| 11. Find $382 - 46$ by four methods. | [5 marks] |
| 12. Find $100 - 92$. | [2 marks] |
| 13. Find $111 - 19$ by three methods. | [5 marks] |
| 14. Find $20 + 70$. | [1 mark] |
| 15. Find $42 + 91$ by adding the tens and then the units. | [2 marks] |
| 16. Find $1755 \div 3$ by long division. | [3 marks] |
| 17. Find $8044692 \div 2$ by long division. | [5 marks] |
| 18. Find $63553 \div 7$ by long division. | [3 marks] |
| 19. Find $2100 \div 12$ by long division. | [3 marks] |
| 20. Find $\frac{12}{4}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 10 (ii) 3
2	$\square = 3$; $5 + 8 = 13$
3	2
4	(i) 88 (ii) 53
5	20
6	6
7	64
8	80
9	13
10	(i) 233 (ii) 423
11	336
12	8
13	92
14	90
15	133
16	585
17	4022346
18	9079
19	175
20	3

Solutions

1. Find (i) $1 + 9$ (ii) $4 - 1$. [1]

(i) Start at 9 and count on 1: $1 + 9 = 10$

(ii) Count back 1 from 4: $4 - 1 = 3$

Ans: (i) 10 (ii) 3

2. Fill in the box and find the sum: $5 + 8 = 10 + \square$. [2]

8 needs 2 to make 10; take 2 from 5, which leaves 3.

$$5 + 8 = 10 + 3 = 13$$

Ans: $\square = 3$; $5 + 8 = 13$

3. Find the number in the box: $4 + \square = 6$. [1]

$$\square = 6 - 4 = 2$$

$$\text{Check: } 4 + 2 = 6$$

Ans: 2

4. Find (i) $90 - 2$ (ii) $60 - 7$. [2]

(i) $90 = 80 + 10$ and $10 - 2 = 8$, so $90 - 2 = 80 + 8 = 88$

(ii) $60 = 50 + 10$ and $10 - 7 = 3$, so $60 - 7 = 50 + 3 = 53$

Ans: (i) 88 (ii) 53

5. Find $26 - 6$. [1]

Take 6 from the units digit: $6 - 6 = 0$; the tens digit 2 stays.

$$26 - 6 = 20$$

Ans: 20

6. Find $12 - 6$ by the 1st and 2nd methods. [2]

1st method: take 2 out of 6 first ($6 - 2 = 4$): $12 - 6 = 10 - 4 = 6$

2nd method: add 4 to both: $12 - 6 = 16 - 10 = 6$

Both methods give $12 - 6 = 6$

Ans: 6

7. Find $72 - 8$ by three methods. [3]

1st method: take 2 out of 8 first ($8 - 2 = 6$): $72 - 8 = 70 - 6 = 64$

2nd method: add 2 to both: $72 - 8 = 74 - 10 = 64$

3rd method: $72 - 10 = 62$ and $10 - 8 = 2$, so $72 - 8 = 62 + 2 = 64$

All three methods give $72 - 8 = 64$

Ans: 64

8. Find $90 - 10$. [1]

9 tens $-$ 1 ten $=$ 8 tens

$$90 - 10 = 80$$

Ans: 80

9. Find $31 - 18$ by four methods. [5]

1st method (take the tens first): $31 - 18 = 21 - 8 = 20 - 7 = 13$

2nd method: add 2 to both: $31 - 18 = 33 - 20 = 13$

3rd method: $31 - 20 = 11$ and $20 - 18 = 2$, so $31 - 18 = 11 + 2 = 13$

4th method (column): $1 < 8$, so borrow 1 ten: units $11 - 8 = 3$, tens $2 - 1 = 1$

All four methods give $31 - 18 = 13$

Ans: 13

10. Find (i) $240 - 7$ (ii) $464 - 41$. [2]

(i) $240 = 230 + 10$ and $10 - 7 = 3$, so $240 - 7 = 230 + 3 = 233$

(ii) units $4 - 1 = 3$, tens $6 - 4 = 2$, hundreds 4 stays: $464 - 41 = 423$

Ans: (i) 233 (ii) 423

11. Find $382 - 46$ by four methods. [5]

1st method (take the tens first): $382 - 46 = 342 - 6 = 340 - 4 = 336$

2nd method: add 4 to both: $382 - 46 = 386 - 50 = 336$

3rd method: $382 - 50 = 332$ and $50 - 46 = 4$, so $382 - 46 = 332 + 4 = 336$

4th method (column): $2 < 6$, so borrow 1 ten: units $12 - 6 = 6$, tens $7 - 4 = 3$, hundreds 3

All four methods give $382 - 46 = 336$

Ans: 336

12. Find $100 - 92$. [2]

Take away the tens first: $100 - 90 = 10$

$100 - 92 = 10 - 2 = 8$

Ans: 8

13. Find $111 - 19$ by three methods. [5]

1st method (column): units $1 < 9$, borrow 1 ten: $11 - 9 = 2$

tens: $0 < 1$, borrow from the hundred: $10 - 1 = 9$, hundreds 0

2nd method: take 1 from both: $111 - 19 = 110 - 18$

take 10 from both: $= 100 - 8 = 92$

3rd method: $111 - 100 = 11$ and $100 - 19 = 81$, so $111 - 19 = 11 + 81 = 92$

All three methods give $111 - 19 = 92$

Ans: 92

14. Find $20 + 70$. [1]

2 tens + 7 tens = 9 tens

$20 + 70 = 90$

Ans: 90

15. Find $42 + 91$ by adding the tens and then the units. [2]

Tens: $40 + 90 = 130$

Units: $2 + 1 = 3$

$42 + 91 = 130 + 3 = 133$

Ans: 133

16. Find $1755 \div 3$ by long division. [3]

$17 \div 3: 3 \times 5 = 15, 17 - 15 = 2$

Bring down 5, we have 25: $3 \times 8 = 24, 25 - 24 = 1$

Bring down 5, we have 15: $3 \times 5 = 15, 15 - 15 = 0$

Remainder 0, so $1755 \div 3 = 585$

Ans: 585

17. Find $8044692 \div 2$ by long division. [5]

$8 \div 2: 2 \times 4 = 8, 8 - 8 = 0$

Bring down 0, we have 0: $0 < 2$, so write 0 in the quotient

Bring down 4, we have 4: $2 \times 2 = 4, 4 - 4 = 0$

Bring down 4, we have 4: $2 \times 2 = 4, 4 - 4 = 0$

Bring down 6, we have 6: $2 \times 3 = 6, 6 - 6 = 0$

Bring down 9, we have 9: $2 \times 4 = 8, 9 - 8 = 1$

Bring down 2, we have 12: $2 \times 6 = 12, 12 - 12 = 0$

Remainder 0, so $8044692 \div 2 = 4022346$

Ans: 4022346

18. Find $63553 \div 7$ by long division. [3]

$63 \div 7: 7 \times 9 = 63, 63 - 63 = 0$

Bring down 5, we have 5: $5 < 7$, so write 0 in the quotient

Bring down 5, we have 55: $7 \times 7 = 49, 55 - 49 = 6$

Bring down 3, we have 63: $7 \times 9 = 63, 63 - 63 = 0$

Remainder 0, so $63553 \div 7 = 9079$

Do not miss the 0 in the quotient.

Ans: 9079

19. Find $2100 \div 12$ by long division. [3]

$21 \div 12: 12 \times 1 = 12, 21 - 12 = 9$

Bring down 0, we have 90: $12 \times 7 = 84, 90 - 84 = 6$

Bring down 0, we have 60: $12 \times 5 = 60, 60 - 60 = 0$

Remainder 0, so $2100 \div 12 = 175$

Ans: 175

20. Find $\frac{12}{4}$. [1]

$\frac{12}{4}$ means $12 \div 4$.

$4 \times 3 = 12$, so $\frac{12}{4} = 3$

Ans: 3
