

Basic Operations

Question Paper, Set 08

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.

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|---|-----------|
| 1. Find (i) $5 + 4$ (ii) $3 - 2$. | [1 mark] |
| 2. Fill in the box and find the sum: $9 + 8 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $1 + \square = 4$. | [1 mark] |
| 4. Find (i) $80 - 7$ (ii) $90 - 4$. | [2 marks] |
| 5. Find $75 - 2$. | [1 mark] |
| 6. Find $11 - 6$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $43 - 8$ by three methods. | [3 marks] |
| 8. Find $87 - 20$. | [1 mark] |
| 9. Find $51 - 23$ by four methods. | [5 marks] |
| 10. Find (i) $450 - 8$ (ii) $496 - 44$. | [2 marks] |
| 11. Find $486 - 59$ by four methods. | [5 marks] |
| 12. Find $100 - 28$. | [2 marks] |
| 13. Find $175 - 96$ by three methods. | [5 marks] |
| 14. Find $50 + 76$. | [1 mark] |
| 15. Find $33 + 15$ by adding the tens and then the units. | [2 marks] |
| 16. Find $2448 \div 9$ by long division. | [3 marks] |
| 17. Find $3970310 \div 5$ by long division. | [5 marks] |
| 18. Find $9321 \div 3$ by long division. | [3 marks] |
| 19. Find $3084 \div 12$ by long division. | [3 marks] |
| 20. Find $\frac{28}{4}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 9 (ii) 1
2	$\square = 7$; $9 + 8 = 17$
3	3
4	(i) 73 (ii) 86
5	73
6	5
7	35
8	67
9	28
10	(i) 442 (ii) 452
11	427
12	72
13	79
14	126
15	48
16	272
17	794062
18	3107
19	257
20	7

Solutions

1. Find (i) $5 + 4$ (ii) $3 - 2$. [1]

(i) Start at 5 and count on 4: $5 + 4 = 9$

(ii) Count back 2 from 3: $3 - 2 = 1$

Ans: (i) 9 (ii) 1

2. Fill in the box and find the sum: $9 + 8 = 10 + \square$. [2]

9 needs 1 to make 10; take 1 from 8, which leaves 7.

$$9 + 8 = 10 + 7 = 17$$

Ans: $\square = 7$; $9 + 8 = 17$

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

$$\square = 4 - 1 = 3$$

$$\text{Check: } 1 + 3 = 4$$

Ans: 3

4. Find (i) $80 - 7$ (ii) $90 - 4$. [2]

(i) $80 = 70 + 10$ and $10 - 7 = 3$, so $80 - 7 = 70 + 3 = 73$

(ii) $90 = 80 + 10$ and $10 - 4 = 6$, so $90 - 4 = 80 + 6 = 86$

Ans: (i) 73 (ii) 86

5. Find $75 - 2$. [1]

Take 2 from the units digit: $5 - 2 = 3$; the tens digit 7 stays.

$$75 - 2 = 73$$

Ans: 73

6. Find $11 - 6$ by the 1st and 2nd methods. [2]

1st method: take 1 out of 6 first ($6 - 1 = 5$): $11 - 6 = 10 - 5 = 5$

2nd method: add 4 to both: $11 - 6 = 15 - 10 = 5$

Both methods give $11 - 6 = 5$

Ans: 5

7. Find $43 - 8$ by three methods. [3]

1st method: take 3 out of 8 first ($8 - 3 = 5$): $43 - 8 = 40 - 5 = 35$

2nd method: add 2 to both: $43 - 8 = 45 - 10 = 35$

3rd method: $43 - 10 = 33$ and $10 - 8 = 2$, so $43 - 8 = 33 + 2 = 35$

All three methods give $43 - 8 = 35$

Ans: 35

8. Find $87 - 20$. [1]

Take 2 tens from 8 tens: $8 - 2 = 6$; the units digit 7 stays.

$$87 - 20 = 67$$

Ans: 67

9. Find $51 - 23$ by four methods. [5]

1st method (take the tens first): $51 - 23 = 31 - 3 = 30 - 2 = 28$

2nd method: add 7 to both: $51 - 23 = 58 - 30 = 28$

3rd method: $51 - 30 = 21$ and $30 - 23 = 7$, so $51 - 23 = 21 + 7 = 28$

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

All four methods give $51 - 23 = 28$

Ans: 28

10. Find (i) $450 - 8$ (ii) $496 - 44$. [2]

(i) $450 = 440 + 10$ and $10 - 8 = 2$, so $450 - 8 = 440 + 2 = 442$

(ii) units $6 - 4 = 2$, tens $9 - 4 = 5$, hundreds 4 stays: $496 - 44 = 452$

Ans: (i) 442 (ii) 452

11. Find $486 - 59$ by four methods. [5]

1st method (take the tens first): $486 - 59 = 436 - 9 = 430 - 3 = 427$

2nd method: add 1 to both: $486 - 59 = 487 - 60 = 427$

3rd method: $486 - 60 = 426$ and $60 - 59 = 1$, so $486 - 59 = 426 + 1 = 427$

4th method (column): $6 < 9$, so borrow 1 ten: units $16 - 9 = 7$, tens $7 - 5 = 2$, hundreds 4

All four methods give $486 - 59 = 427$

Ans: 427

12. Find $100 - 28$. [2]

Take away the tens first: $100 - 20 = 80$

$100 - 28 = 80 - 8 = 72$

Ans: 72

13. Find $175 - 96$ by three methods. [5]

1st method (column): units $5 < 6$, borrow 1 ten: $15 - 6 = 9$

tens: $6 < 9$, borrow from the hundred: $16 - 9 = 7$, hundreds 0

2nd method: take 5 from both: $175 - 96 = 170 - 91$

take 70 from both: $= 100 - 21 = 79$

3rd method: $175 - 100 = 75$ and $100 - 96 = 4$, so $175 - 96 = 75 + 4 = 79$

All three methods give $175 - 96 = 79$

Ans: 79

14. Find $50 + 76$. [1]

Add the tens: $50 + 70 = 120$; the units digit 6 stays.

$50 + 76 = 126$

Ans: 126

15. Find $33 + 15$ by adding the tens and then the units. [2]

Tens: $30 + 10 = 40$

Units: $3 + 5 = 8$

$33 + 15 = 40 + 8 = 48$

Ans: 48

16. Find $2448 \div 9$ by long division. [3]

$24 \div 9$: $9 \times 2 = 18$, $24 - 18 = 6$

Bring down 4, we have 64: $9 \times 7 = 63$, $64 - 63 = 1$

Bring down 8, we have 18: $9 \times 2 = 18$, $18 - 18 = 0$

Remainder 0, so $2448 \div 9 = 272$

Ans: 272

17. Find $3970310 \div 5$ by long division. [5]

$39 \div 5$: $5 \times 7 = 35$, $39 - 35 = 4$

Bring down 7, we have 47: $5 \times 9 = 45$, $47 - 45 = 2$

Bring down 0, we have 20: $5 \times 4 = 20$, $20 - 20 = 0$

Bring down 3, we have 3: $3 < 5$, so write 0 in the quotient

Bring down 1, we have 31: $5 \times 6 = 30$, $31 - 30 = 1$

Bring down 0, we have 10: $5 \times 2 = 10$, $10 - 10 = 0$

Remainder 0, so $3970310 \div 5 = 794062$

Ans: 794062

18. Find $9321 \div 3$ by long division. [3]

$9 \div 3$: $3 \times 3 = 9$, $9 - 9 = 0$

Bring down 3, we have 3: $3 \times 1 = 3$, $3 - 3 = 0$

Bring down 2, we have 2: $2 < 3$, so write 0 in the quotient

Bring down 1, we have 21: $3 \times 7 = 21$, $21 - 21 = 0$

Remainder 0, so $9321 \div 3 = 3107$

Do not miss the 0 in the quotient.

Ans: 3107

19. Find $3084 \div 12$ by long division. [3]

$30 \div 12$: $12 \times 2 = 24$, $30 - 24 = 6$

Bring down 8, we have 68: $12 \times 5 = 60$, $68 - 60 = 8$

Bring down 4, we have 84: $12 \times 7 = 84$, $84 - 84 = 0$

Remainder 0, so $3084 \div 12 = 257$

Ans: 257

20. Find $\frac{28}{4}$. [1]

$\frac{28}{4}$ means $28 \div 4$.

$4 \times 7 = 28$, so $\frac{28}{4} = 7$

Ans: 7
