

Basic Operations

Question Paper, Set 07

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) $1 + 3$ (ii) $9 - 7$. | [1 mark] |
| 2. Fill in the box and find the sum: $9 + 7 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $5 + \square = 9$. | [1 mark] |
| 4. Find (i) $70 - 4$ (ii) $40 - 6$. | [2 marks] |
| 5. Find $86 - 6$. | [1 mark] |
| 6. Find $14 - 5$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $44 - 9$ by three methods. | [3 marks] |
| 8. Find $50 - 10$. | [1 mark] |
| 9. Find $32 - 14$ by four methods. | [5 marks] |
| 10. Find (i) $190 - 7$ (ii) $266 - 23$. | [2 marks] |
| 11. Find $468 - 19$ by four methods. | [5 marks] |
| 12. Find $100 - 88$. | [2 marks] |
| 13. Find $146 - 98$ by three methods. | [5 marks] |
| 14. Find $50 + 50$. | [1 mark] |
| 15. Find $33 + 11$ by adding the tens and then the units. | [2 marks] |
| 16. Find $1071 \div 3$ by long division. | [3 marks] |
| 17. Find $2826148 \div 2$ by long division. | [5 marks] |
| 18. Find $15212 \div 2$ by long division. | [3 marks] |
| 19. Find $7931 \div 11$ by long division. | [3 marks] |
| 20. Find $\frac{30}{3}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 4 (ii) 2
2	$\square = 6$; $9 + 7 = 16$
3	4
4	(i) 66 (ii) 34
5	80
6	9
7	35
8	40
9	18
10	(i) 183 (ii) 243
11	449
12	12
13	48
14	100
15	44
16	357
17	1413074
18	7606
19	721
20	10

Solutions

1. Find (i) $1 + 3$ (ii) $9 - 7$. [1]

(i) Start at 3 and count on 1: $1 + 3 = 4$

(ii) Count back 7 from 9: $9 - 7 = 2$

Ans: (i) 4 (ii) 2

2. Fill in the box and find the sum: $9 + 7 = 10 + \square$. [2]

9 needs 1 to make 10; take 1 from 7, which leaves 6.

$$9 + 7 = 10 + 6 = 16$$

Ans: $\square = 6$; $9 + 7 = 16$

3. Find the number in the box: $5 + \square = 9$. [1]

$$\square = 9 - 5 = 4$$

$$\text{Check: } 5 + 4 = 9$$

Ans: 4

4. Find (i) $70 - 4$ (ii) $40 - 6$. [2]

(i) $70 = 60 + 10$ and $10 - 4 = 6$, so $70 - 4 = 60 + 6 = 66$

(ii) $40 = 30 + 10$ and $10 - 6 = 4$, so $40 - 6 = 30 + 4 = 34$

Ans: (i) 66 (ii) 34

5. Find $86 - 6$. [1]

Take 6 from the units digit: $6 - 6 = 0$; the tens digit 8 stays.

$$86 - 6 = 80$$

Ans: 80

6. Find $14 - 5$ by the 1st and 2nd methods. [2]

1st method: take 4 out of 5 first ($5 - 4 = 1$): $14 - 5 = 10 - 1 = 9$

2nd method: add 5 to both: $14 - 5 = 19 - 10 = 9$

Both methods give $14 - 5 = 9$

Ans: 9

7. Find $44 - 9$ by three methods. [3]

1st method: take 4 out of 9 first ($9 - 4 = 5$): $44 - 9 = 40 - 5 = 35$

2nd method: add 1 to both: $44 - 9 = 45 - 10 = 35$

3rd method: $44 - 10 = 34$ and $10 - 9 = 1$, so $44 - 9 = 34 + 1 = 35$

All three methods give $44 - 9 = 35$

Ans: 35

8. Find $50 - 10$. [1]

5 tens $-$ 1 ten $=$ 4 tens

$$50 - 10 = 40$$

Ans: 40

9. Find $32 - 14$ by four methods. [5]

1st method (take the tens first): $32 - 14 = 22 - 4 = 20 - 2 = 18$

2nd method: add 6 to both: $32 - 14 = 38 - 20 = 18$

3rd method: $32 - 20 = 12$ and $20 - 14 = 6$, so $32 - 14 = 12 + 6 = 18$

4th method (column): $2 < 4$, so borrow 1 ten: units $12 - 4 = 8$, tens $2 - 1 = 1$

All four methods give $32 - 14 = 18$

Ans: 18

10. Find (i) $190 - 7$ (ii) $266 - 23$. [2]

(i) $190 = 180 + 10$ and $10 - 7 = 3$, so $190 - 7 = 180 + 3 = 183$

(ii) units $6 - 3 = 3$, tens $6 - 2 = 4$, hundreds 2 stays: $266 - 23 = 243$

Ans: (i) 183 (ii) 243

11. Find $468 - 19$ by four methods. [5]

1st method (take the tens first): $468 - 19 = 458 - 9 = 450 - 1 = 449$

2nd method: add 1 to both: $468 - 19 = 469 - 20 = 449$

3rd method: $468 - 20 = 448$ and $20 - 19 = 1$, so $468 - 19 = 448 + 1 = 449$

4th method (column): $8 < 9$, so borrow 1 ten: units $18 - 9 = 9$, tens $5 - 1 = 4$, hundreds 4

All four methods give $468 - 19 = 449$

Ans: 449

12. Find $100 - 88$. [2]

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

$100 - 88 = 20 - 8 = 12$

Ans: 12

13. Find $146 - 98$ by three methods. [5]

1st method (column): units $6 < 8$, borrow 1 ten: $16 - 8 = 8$

tens: $3 < 9$, borrow from the hundred: $13 - 9 = 4$, hundreds 0

2nd method: take 6 from both: $146 - 98 = 140 - 92$

take 40 from both: $= 100 - 52 = 48$

3rd method: $146 - 100 = 46$ and $100 - 98 = 2$, so $146 - 98 = 46 + 2 = 48$

All three methods give $146 - 98 = 48$

Ans: 48

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

5 tens + 5 tens = 10 tens

$50 + 50 = 100$

Ans: 100

15. Find $33 + 11$ by adding the tens and then the units. [2]

Tens: $30 + 10 = 40$

Units: $3 + 1 = 4$

$33 + 11 = 40 + 4 = 44$

Ans: 44

16. Find $1071 \div 3$ by long division. [3]

$10 \div 3$: $3 \times 3 = 9$, $10 - 9 = 1$

Bring down 7, we have 17: $3 \times 5 = 15$, $17 - 15 = 2$

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

Remainder 0, so $1071 \div 3 = 357$

Ans: 357

17. Find $2826148 \div 2$ by long division. [5]

$2 \div 2$: $2 \times 1 = 2$, $2 - 2 = 0$

Bring down 8, we have 8: $2 \times 4 = 8$, $8 - 8 = 0$

Bring down 2, we have 2: $2 \times 1 = 2$, $2 - 2 = 0$

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

Bring down 1, we have 1: $1 < 2$, so write 0 in the quotient

Bring down 4, we have 14: $2 \times 7 = 14$, $14 - 14 = 0$

Bring down 8, we have 8: $2 \times 4 = 8$, $8 - 8 = 0$

Remainder 0, so $2826148 \div 2 = 1413074$

Ans: 1413074

18. Find $15212 \div 2$ by long division. [3]

$15 \div 2$: $2 \times 7 = 14$, $15 - 14 = 1$

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

Bring down 1, we have 1: $1 < 2$, so write 0 in the quotient

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

Remainder 0, so $15212 \div 2 = 7606$

Do not miss the 0 in the quotient.

Ans: 7606

19. Find $7931 \div 11$ by long division. [3]

$79 \div 11$: $11 \times 7 = 77$, $79 - 77 = 2$

Bring down 3, we have 23: $11 \times 2 = 22$, $23 - 22 = 1$

Bring down 1, we have 11: $11 \times 1 = 11$, $11 - 11 = 0$

Remainder 0, so $7931 \div 11 = 721$

Ans: 721

20. Find $\frac{30}{3}$. [1]

$\frac{30}{3}$ means $30 \div 3$.

$3 \times 10 = 30$, so $\frac{30}{3} = 10$

Ans: 10
