

Basic Operations

Question Paper, Set 10

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) $2 + 1$ (ii) $6 - 5$. | [1 mark] |
| 2. Find the numbers in the boxes: (i) $2 + \square = 10$ (ii) $7 + \square = 10$ | [2 marks] |
| 3. Find the number in the box: $4 + \square = 7$. | [1 mark] |
| 4. Find (i) $80 - 2$ (ii) $40 - 4$. | [2 marks] |
| 5. Find $48 - 6$. | [1 mark] |
| 6. Find $11 - 4$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $47 - 9$ by three methods. | [3 marks] |
| 8. Find $81 - 30$. | [1 mark] |
| 9. Find $84 - 45$ by four methods. | [5 marks] |
| 10. Find (i) $120 - 5$ (ii) $377 - 66$. | [2 marks] |
| 11. Find $384 - 45$ by four methods. | [5 marks] |
| 12. Find $100 - 98$. | [2 marks] |
| 13. Find $117 - 59$ by three methods. | [5 marks] |
| 14. Find $80 + 96$. | [1 mark] |
| 15. Find $43 + 42$ by adding the tens and then the units. | [2 marks] |
| 16. Find $1426 \div 2$ by long division. | [3 marks] |
| 17. Find $5621670 \div 5$ by long division. | [5 marks] |
| 18. Find $10235 \div 5$ by long division. | [3 marks] |
| 19. Find $1507 \div 11$ by long division. | [3 marks] |
| 20. Find $\frac{16}{2}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 3 (ii) 1
2	(i) 8 (ii) 3
3	3
4	(i) 78 (ii) 36
5	42
6	7
7	38
8	51
9	39
10	(i) 115 (ii) 311
11	339
12	2
13	58
14	176
15	85
16	713
17	1124334
18	2047
19	137
20	8

Solutions

1. Find (i) $2 + 1$ (ii) $6 - 5$. [1]

(i) Start at 2 and count on 1: $2 + 1 = 3$

(ii) Count back 5 from 6: $6 - 5 = 1$

Ans: (i) 3 (ii) 1

2. Find the numbers in the boxes: (i) $2 + \square = 10$ (ii) $7 + \square = 10$ [2]

(i) $\square = 10 - 2 = 8$ (check: $2 + 8 = 10$)

(ii) $\square = 10 - 7 = 3$ (check: $7 + 3 = 10$)

Ans: (i) 8 (ii) 3

3. Find the number in the box: $4 + \square = 7$. [1]

$\square = 7 - 4 = 3$

Check: $4 + 3 = 7$

Ans: 3

4. Find (i) $80 - 2$ (ii) $40 - 4$. [2]

(i) $80 = 70 + 10$ and $10 - 2 = 8$, so $80 - 2 = 70 + 8 = 78$

(ii) $40 = 30 + 10$ and $10 - 4 = 6$, so $40 - 4 = 30 + 6 = 36$

Ans: (i) 78 (ii) 36

5. Find $48 - 6$. [1]

Take 6 from the units digit: $8 - 6 = 2$; the tens digit 4 stays.

$48 - 6 = 42$

Ans: 42

6. Find $11 - 4$ by the 1st and 2nd methods. [2]

1st method: take 1 out of 4 first ($4 - 1 = 3$): $11 - 4 = 10 - 3 = 7$

2nd method: add 6 to both: $11 - 4 = 17 - 10 = 7$

Both methods give $11 - 4 = 7$

Ans: 7

7. Find $47 - 9$ by three methods. [3]

1st method: take 7 out of 9 first ($9 - 7 = 2$): $47 - 9 = 40 - 2 = 38$

2nd method: add 1 to both: $47 - 9 = 48 - 10 = 38$

3rd method: $47 - 10 = 37$ and $10 - 9 = 1$, so $47 - 9 = 37 + 1 = 38$

All three methods give $47 - 9 = 38$

Ans: 38

8. Find $81 - 30$. [1]

Take 3 tens from 8 tens: $8 - 3 = 5$; the units digit 1 stays.

$81 - 30 = 51$

Ans: 51

9. Find $84 - 45$ by four methods. [5]

1st method (take the tens first): $84 - 45 = 44 - 5 = 40 - 1 = 39$

2nd method: add 5 to both: $84 - 45 = 89 - 50 = 39$

3rd method: $84 - 50 = 34$ and $50 - 45 = 5$, so $84 - 45 = 34 + 5 = 39$

4th method (column): $4 < 5$, so borrow 1 ten: units $14 - 5 = 9$, tens $7 - 4 = 3$

All four methods give $84 - 45 = 39$

Ans: 39

10. Find (i) $120 - 5$ (ii) $377 - 66$. [2]

(i) $120 = 110 + 10$ and $10 - 5 = 5$, so $120 - 5 = 110 + 5 = 115$

(ii) units $7 - 6 = 1$, tens $7 - 6 = 1$, hundreds 3 stays: $377 - 66 = 311$

Ans: (i) 115 (ii) 311

11. Find $384 - 45$ by four methods. [5]

1st method (take the tens first): $384 - 45 = 344 - 5 = 340 - 1 = 339$

2nd method: add 5 to both: $384 - 45 = 389 - 50 = 339$

3rd method: $384 - 50 = 334$ and $50 - 45 = 5$, so $384 - 45 = 334 + 5 = 339$

4th method (column): $4 < 5$, so borrow 1 ten: units $14 - 5 = 9$, tens $7 - 4 = 3$, hundreds 3

All four methods give $384 - 45 = 339$

Ans: 339

12. Find $100 - 98$. [2]

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

$100 - 98 = 10 - 8 = 2$

Ans: 2

13. Find $117 - 59$ by three methods. [5]

1st method (column): units $7 < 9$, borrow 1 ten: $17 - 9 = 8$

tens: $0 < 5$, borrow from the hundred: $10 - 5 = 5$, hundreds 0

2nd method: take 7 from both: $117 - 59 = 110 - 52$

take 10 from both: $= 100 - 42 = 58$

3rd method: $117 - 100 = 17$ and $100 - 59 = 41$, so $117 - 59 = 17 + 41 = 58$

All three methods give $117 - 59 = 58$

Ans: 58

14. Find $80 + 96$. [1]

Add the tens: $80 + 90 = 170$; the units digit 6 stays.

$80 + 96 = 176$

Ans: 176

15. Find $43 + 42$ by adding the tens and then the units. [2]

Tens: $40 + 40 = 80$

Units: $3 + 2 = 5$

$43 + 42 = 80 + 5 = 85$

Ans: 85

16. Find $1426 \div 2$ by long division. [3]

$14 \div 2$: $2 \times 7 = 14$, $14 - 14 = 0$

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

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

Remainder 0, so $1426 \div 2 = 713$

Ans: 713

17. Find $5621670 \div 5$ by long division. [5]

$5 \div 5$: $5 \times 1 = 5$, $5 - 5 = 0$

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

Bring down 2, we have 12: $5 \times 2 = 10$, $12 - 10 = 2$

Bring down 1, we have 21: $5 \times 4 = 20$, $21 - 20 = 1$

Bring down 6, we have 16: $5 \times 3 = 15$, $16 - 15 = 1$

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

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

Remainder 0, so $5621670 \div 5 = 1124334$

Ans: 1124334

18. Find $10235 \div 5$ by long division. [3]

$10 \div 5$: $5 \times 2 = 10$, $10 - 10 = 0$

Bring down 2, we have 2: $2 < 5$, so write 0 in the quotient

Bring down 3, we have 23: $5 \times 4 = 20$, $23 - 20 = 3$

Bring down 5, we have 35: $5 \times 7 = 35$, $35 - 35 = 0$

Remainder 0, so $10235 \div 5 = 2047$

Do not miss the 0 in the quotient.

Ans: 2047

19. Find $1507 \div 11$ by long division. [3]

$15 \div 11$: $11 \times 1 = 11$, $15 - 11 = 4$

Bring down 0, we have 40: $11 \times 3 = 33$, $40 - 33 = 7$

Bring down 7, we have 77: $11 \times 7 = 77$, $77 - 77 = 0$

Remainder 0, so $1507 \div 11 = 137$

Ans: 137

20. Find $\frac{16}{2}$. [1]

$\frac{16}{2}$ means $16 \div 2$.

$2 \times 8 = 16$, so $\frac{16}{2} = 8$

Ans: 8
