

Basic Operations

Question Paper, Set 06

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) $2 + 6$ (ii) $6 - 1$. | [1 mark] |
| 2. Fill in the box and find the sum: $7 + 7 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $1 + \square = 5$. | [1 mark] |
| 4. Find (i) $80 - 9$ (ii) $40 - 3$. | [2 marks] |
| 5. Find $44 - 4$. | [1 mark] |
| 6. Find $13 - 6$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $93 - 8$ by three methods. | [3 marks] |
| 8. Find $85 - 50$. | [1 mark] |
| 9. Find $82 - 58$ by four methods. | [5 marks] |
| 10. Find (i) $170 - 5$ (ii) $459 - 16$. | [2 marks] |
| 11. Find $470 - 33$ by four methods. | [5 marks] |
| 12. Find $100 - 11$. | [2 marks] |
| 13. Find $181 - 88$ by three methods. | [5 marks] |
| 14. Find $20 + 15$. | [1 mark] |
| 15. Find $65 + 74$ by adding the tens and then the units. | [2 marks] |
| 16. Find $4986 \div 9$ by long division. | [3 marks] |
| 17. Find $7550250 \div 5$ by long division. | [5 marks] |
| 18. Find $27405 \div 9$ by long division. | [3 marks] |
| 19. Find $9852 \div 12$ by long division. | [3 marks] |
| 20. Find $\frac{35}{5}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 8 (ii) 5
2	$\square = 4$; $7 + 7 = 14$
3	4
4	(i) 71 (ii) 37
5	40
6	7
7	85
8	35
9	24
10	(i) 165 (ii) 443
11	437
12	89
13	93
14	35
15	139
16	554
17	1510050
18	3045
19	821
20	7

Solutions

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

(i) Start at 6 and count on 2: $2 + 6 = 8$

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

Ans: (i) 8 (ii) 5

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

7 needs 3 to make 10; take 3 from 7, which leaves 4.

$$7 + 7 = 10 + 4 = 14$$

Ans: $\square = 4$; $7 + 7 = 14$

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

$$\square = 5 - 1 = 4$$

$$\text{Check: } 1 + 4 = 5$$

Ans: 4

4. Find (i) $80 - 9$ (ii) $40 - 3$. [2]

(i) $80 = 70 + 10$ and $10 - 9 = 1$, so $80 - 9 = 70 + 1 = 71$

(ii) $40 = 30 + 10$ and $10 - 3 = 7$, so $40 - 3 = 30 + 7 = 37$

Ans: (i) 71 (ii) 37

5. Find $44 - 4$. [1]

Take 4 from the units digit: $4 - 4 = 0$; the tens digit 4 stays.

$$44 - 4 = 40$$

Ans: 40

6. Find $13 - 6$ by the 1st and 2nd methods. [2]

1st method: take 3 out of 6 first ($6 - 3 = 3$): $13 - 6 = 10 - 3 = 7$

2nd method: add 4 to both: $13 - 6 = 17 - 10 = 7$

Both methods give $13 - 6 = 7$

Ans: 7

7. Find $93 - 8$ by three methods. [3]

1st method: take 3 out of 8 first ($8 - 3 = 5$): $93 - 8 = 90 - 5 = 85$

2nd method: add 2 to both: $93 - 8 = 95 - 10 = 85$

3rd method: $93 - 10 = 83$ and $10 - 8 = 2$, so $93 - 8 = 83 + 2 = 85$

All three methods give $93 - 8 = 85$

Ans: 85

8. Find $85 - 50$. [1]

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

$$85 - 50 = 35$$

Ans: 35

9. Find $82 - 58$ by four methods. [5]

1st method (take the tens first): $82 - 58 = 32 - 8 = 30 - 6 = 24$

2nd method: add 2 to both: $82 - 58 = 84 - 60 = 24$

3rd method: $82 - 60 = 22$ and $60 - 58 = 2$, so $82 - 58 = 22 + 2 = 24$

4th method (column): $2 < 8$, so borrow 1 ten: units $12 - 8 = 4$, tens $7 - 5 = 2$

All four methods give $82 - 58 = 24$

Ans: 24

10. Find (i) $170 - 5$ (ii) $459 - 16$. [2]

(i) $170 = 160 + 10$ and $10 - 5 = 5$, so $170 - 5 = 160 + 5 = 165$

(ii) units $9 - 6 = 3$, tens $5 - 1 = 4$, hundreds 4 stays: $459 - 16 = 443$

Ans: (i) 165 (ii) 443

11. Find $470 - 33$ by four methods. [5]

1st method (take the tens first): $470 - 33 = 440 - 3 = 437$

2nd method: add 7 to both: $470 - 33 = 477 - 40 = 437$

3rd method: $470 - 40 = 430$ and $40 - 33 = 7$, so $470 - 33 = 430 + 7 = 437$

4th method (column): $0 < 3$, so borrow 1 ten: units $10 - 3 = 7$, tens $6 - 3 = 3$, hundreds 4

All four methods give $470 - 33 = 437$

Ans: 437

12. Find $100 - 11$. [2]

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

$100 - 11 = 90 - 1 = 89$

Ans: 89

13. Find $181 - 88$ by three methods. [5]

1st method (column): units $1 < 8$, borrow 1 ten: $11 - 8 = 3$

tens: $7 < 8$, borrow from the hundred: $17 - 8 = 9$, hundreds 0

2nd method: take 1 from both: $181 - 88 = 180 - 87$

take 80 from both: $= 100 - 7 = 93$

3rd method: $181 - 100 = 81$ and $100 - 88 = 12$, so $181 - 88 = 81 + 12 = 93$

All three methods give $181 - 88 = 93$

Ans: 93

14. Find $20 + 15$. [1]

Add the tens: $20 + 10 = 30$; the units digit 5 stays.

$20 + 15 = 35$

Ans: 35

15. Find $65 + 74$ by adding the tens and then the units. [2]

Tens: $60 + 70 = 130$

Units: $5 + 4 = 9$

$65 + 74 = 130 + 9 = 139$

Ans: 139

16. Find $4986 \div 9$ by long division. [3]

$49 \div 9$: $9 \times 5 = 45$, $49 - 45 = 4$

Bring down 8, we have 48: $9 \times 5 = 45$, $48 - 45 = 3$

Bring down 6, we have 36: $9 \times 4 = 36$, $36 - 36 = 0$

Remainder 0, so $4986 \div 9 = 554$

Ans: 554

17. Find $7550250 \div 5$ by long division. [5]

$7 \div 5$: $5 \times 1 = 5$, $7 - 5 = 2$

Bring down 5, we have 25: $5 \times 5 = 25$, $25 - 25 = 0$

Bring down 5, we have 5: $5 \times 1 = 5$, $5 - 5 = 0$

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

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

Bring down 5, we have 25: $5 \times 5 = 25$, $25 - 25 = 0$

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

Remainder 0, so $7550250 \div 5 = 1510050$

Ans: 1510050

18. Find $27405 \div 9$ by long division. [3]

$27 \div 9$: $9 \times 3 = 27$, $27 - 27 = 0$

Bring down 4, we have 4: $4 < 9$, so write 0 in the quotient

Bring down 0, we have 40: $9 \times 4 = 36$, $40 - 36 = 4$

Bring down 5, we have 45: $9 \times 5 = 45$, $45 - 45 = 0$

Remainder 0, so $27405 \div 9 = 3045$

Do not miss the 0 in the quotient.

Ans: 3045

19. Find $9852 \div 12$ by long division. [3]

$98 \div 12$: $12 \times 8 = 96$, $98 - 96 = 2$

Bring down 5, we have 25: $12 \times 2 = 24$, $25 - 24 = 1$

Bring down 2, we have 12: $12 \times 1 = 12$, $12 - 12 = 0$

Remainder 0, so $9852 \div 12 = 821$

Ans: 821

20. Find $\frac{35}{5}$. [1]

$\frac{35}{5}$ means $35 \div 5$.

$5 \times 7 = 35$, so $\frac{35}{5} = 7$

Ans: 7
