

Basic Operations

Question Paper, Set 09

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) $4 + 2$ (ii) $8 - 4$. | [1 mark] |
| 2. Find the numbers in the boxes: (i) $6 + \square = 8$ (ii) $3 + \square = 10$ | [2 marks] |
| 3. Find the number in the box: $1 + \square = 8$. | [1 mark] |
| 4. Find (i) $50 - 5$ (ii) $40 - 2$. | [2 marks] |
| 5. Find $89 - 8$. | [1 mark] |
| 6. Find $15 - 7$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $32 - 8$ by three methods. | [3 marks] |
| 8. Find $70 - 40$. | [1 mark] |
| 9. Find $92 - 69$ by four methods. | [5 marks] |
| 10. Find (i) $140 - 9$ (ii) $256 - 36$. | [2 marks] |
| 11. Find $440 - 16$ by four methods. | [5 marks] |
| 12. Find $100 - 16$. | [2 marks] |
| 13. Find $113 - 54$ by three methods. | [5 marks] |
| 14. Find $40 + 30$. | [1 mark] |
| 15. Find $52 + 96$ by adding the tens and then the units. | [2 marks] |
| 16. Find $2758 \div 7$ by long division. | [3 marks] |
| 17. Find $7699110 \div 2$ by long division. | [5 marks] |
| 18. Find $4016 \div 2$ by long division. | [3 marks] |
| 19. Find $4752 \div 12$ by long division. | [3 marks] |
| 20. Find $\frac{18}{3}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 6 (ii) 4
2	(i) 2 (ii) 7
3	7
4	(i) 45 (ii) 38
5	81
6	8
7	24
8	30
9	23
10	(i) 131 (ii) 220
11	424
12	84
13	59
14	70
15	148
16	394
17	3849555
18	2008
19	396
20	6

Solutions

1. Find (i) $4 + 2$ (ii) $8 - 4$. [1]

(i) Start at 4 and count on 2: $4 + 2 = 6$

(ii) Count back 4 from 8: $8 - 4 = 4$

Ans: (i) 6 (ii) 4

2. Find the numbers in the boxes: (i) $6 + \square = 8$ (ii) $3 + \square = 10$ [2]

(i) $\square = 8 - 6 = 2$ (check: $6 + 2 = 8$)

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

Ans: (i) 2 (ii) 7

3. Find the number in the box: $1 + \square = 8$. [1]

$\square = 8 - 1 = 7$

Check: $1 + 7 = 8$

Ans: 7

4. Find (i) $50 - 5$ (ii) $40 - 2$. [2]

(i) $50 = 40 + 10$ and $10 - 5 = 5$, so $50 - 5 = 40 + 5 = 45$

(ii) $40 = 30 + 10$ and $10 - 2 = 8$, so $40 - 2 = 30 + 8 = 38$

Ans: (i) 45 (ii) 38

5. Find $89 - 8$. [1]

Take 8 from the units digit: $9 - 8 = 1$; the tens digit 8 stays.

$89 - 8 = 81$

Ans: 81

6. Find $15 - 7$ by the 1st and 2nd methods. [2]

1st method: take 5 out of 7 first ($7 - 5 = 2$): $15 - 7 = 10 - 2 = 8$

2nd method: add 3 to both: $15 - 7 = 18 - 10 = 8$

Both methods give $15 - 7 = 8$

Ans: 8

7. Find $32 - 8$ by three methods. [3]

1st method: take 2 out of 8 first ($8 - 2 = 6$): $32 - 8 = 30 - 6 = 24$

2nd method: add 2 to both: $32 - 8 = 34 - 10 = 24$

3rd method: $32 - 10 = 22$ and $10 - 8 = 2$, so $32 - 8 = 22 + 2 = 24$

All three methods give $32 - 8 = 24$

Ans: 24

8. Find $70 - 40$. [1]

7 tens $-$ 4 tens $=$ 3 tens

$70 - 40 = 30$

Ans: 30

9. Find $92 - 69$ by four methods. [5]

1st method (take the tens first): $92 - 69 = 32 - 9 = 30 - 7 = 23$

2nd method: add 1 to both: $92 - 69 = 93 - 70 = 23$

3rd method: $92 - 70 = 22$ and $70 - 69 = 1$, so $92 - 69 = 22 + 1 = 23$

4th method (column): $2 < 9$, so borrow 1 ten: units $12 - 9 = 3$, tens $8 - 6 = 2$

All four methods give $92 - 69 = 23$

Ans: 23

10. Find (i) $140 - 9$ (ii) $256 - 36$. [2]

(i) $140 = 130 + 10$ and $10 - 9 = 1$, so $140 - 9 = 130 + 1 = 131$

(ii) units $6 - 6 = 0$, tens $5 - 3 = 2$, hundreds 2 stays: $256 - 36 = 220$

Ans: (i) 131 (ii) 220

11. Find $440 - 16$ by four methods. [5]

1st method (take the tens first): $440 - 16 = 430 - 6 = 424$

2nd method: add 4 to both: $440 - 16 = 444 - 20 = 424$

3rd method: $440 - 20 = 420$ and $20 - 16 = 4$, so $440 - 16 = 420 + 4 = 424$

4th method (column): $0 < 6$, so borrow 1 ten: units $10 - 6 = 4$, tens $3 - 1 = 2$, hundreds 4

All four methods give $440 - 16 = 424$

Ans: 424

12. Find $100 - 16$. [2]

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

$100 - 16 = 90 - 6 = 84$

Ans: 84

13. Find $113 - 54$ by three methods. [5]

1st method (column): units $3 < 4$, borrow 1 ten: $13 - 4 = 9$

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

2nd method: take 3 from both: $113 - 54 = 110 - 51$

take 10 from both: $= 100 - 41 = 59$

3rd method: $113 - 100 = 13$ and $100 - 54 = 46$, so $113 - 54 = 13 + 46 = 59$

All three methods give $113 - 54 = 59$

Ans: 59

14. Find $40 + 30$. [1]

4 tens + 3 tens = 7 tens

$40 + 30 = 70$

Ans: 70

15. Find $52 + 96$ by adding the tens and then the units. [2]

Tens: $50 + 90 = 140$

Units: $2 + 6 = 8$

$52 + 96 = 140 + 8 = 148$

Ans: 148

16. Find $2758 \div 7$ by long division. [3]

$27 \div 7: 7 \times 3 = 21, 27 - 21 = 6$

Bring down 5, we have 65: $7 \times 9 = 63, 65 - 63 = 2$

Bring down 8, we have 28: $7 \times 4 = 28, 28 - 28 = 0$

Remainder 0, so $2758 \div 7 = 394$

Ans: 394

17. Find $7699110 \div 2$ by long division. [5]

$7 \div 2: 2 \times 3 = 6, 7 - 6 = 1$

Bring down 6, we have 16: $2 \times 8 = 16, 16 - 16 = 0$

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

Bring down 9, we have 19: $2 \times 9 = 18, 19 - 18 = 1$

Bring down 1, we have 11: $2 \times 5 = 10, 11 - 10 = 1$

Bring down 1, we have 11: $2 \times 5 = 10, 11 - 10 = 1$

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

Remainder 0, so $7699110 \div 2 = 3849555$

Ans: 3849555

18. Find $4016 \div 2$ by long division. [3]

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

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

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

Bring down 6, we have 16: $2 \times 8 = 16, 16 - 16 = 0$

Remainder 0, so $4016 \div 2 = 2008$

Do not miss the 0 in the quotient.

Ans: 2008

19. Find $4752 \div 12$ by long division. [3]

$47 \div 12: 12 \times 3 = 36, 47 - 36 = 11$

Bring down 5, we have 115: $12 \times 9 = 108, 115 - 108 = 7$

Bring down 2, we have 72: $12 \times 6 = 72, 72 - 72 = 0$

Remainder 0, so $4752 \div 12 = 396$

Ans: 396

20. Find $\frac{18}{3}$. [1]

$\frac{18}{3}$ means $18 \div 3$.

$3 \times 6 = 18$, so $\frac{18}{3} = 6$

Ans: 6
