

Basic Operations

Question Paper, Set 03

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) $1 + 5$ (ii) $3 - 1$. | [1 mark] |
| 2. Fill in the box and find the sum: $6 + 6 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $3 + \square = 6$. | [1 mark] |
| 4. Find (i) $50 - 2$ (ii) $90 - 5$. | [2 marks] |
| 5. Find $56 - 3$. | [1 mark] |
| 6. Find $11 - 5$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $36 - 8$ by three methods. | [3 marks] |
| 8. Find $90 - 80$. | [1 mark] |
| 9. Find $97 - 78$ by four methods. | [5 marks] |
| 10. Find (i) $490 - 8$ (ii) $467 - 21$. | [2 marks] |
| 11. Find $271 - 58$ by four methods. | [5 marks] |
| 12. Find $100 - 65$. | [2 marks] |
| 13. Find $143 - 57$ by three methods. | [5 marks] |
| 14. Find $10 + 50$. | [1 mark] |
| 15. Find $45 + 31$ by adding the tens and then the units. | [2 marks] |
| 16. Find $7016 \div 8$ by long division. | [3 marks] |
| 17. Find $6839904 \div 2$ by long division. | [5 marks] |
| 18. Find $72656 \div 8$ by long division. | [3 marks] |
| 19. Find $4818 \div 11$ by long division. | [3 marks] |
| 20. Find $\frac{24}{4}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 6 (ii) 2
2	$\square = 2$; $6 + 6 = 12$
3	3
4	(i) 48 (ii) 85
5	53
6	6
7	28
8	10
9	19
10	(i) 482 (ii) 446
11	213
12	35
13	86
14	60
15	76
16	877
17	3419952
18	9082
19	438
20	6

Solutions

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

(i) Start at 5 and count on 1: $1 + 5 = 6$

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

Ans: (i) 6 (ii) 2

2. Fill in the box and find the sum: $6 + 6 = 10 + \square$. [2]

6 needs 4 to make 10; take 4 from 6, which leaves 2.

$$6 + 6 = 10 + 2 = 12$$

Ans: $\square = 2$; $6 + 6 = 12$

3. Find the number in the box: $3 + \square = 6$. [1]

$$\square = 6 - 3 = 3$$

$$\text{Check: } 3 + 3 = 6$$

Ans: 3

4. Find (i) $50 - 2$ (ii) $90 - 5$. [2]

(i) $50 = 40 + 10$ and $10 - 2 = 8$, so $50 - 2 = 40 + 8 = 48$

(ii) $90 = 80 + 10$ and $10 - 5 = 5$, so $90 - 5 = 80 + 5 = 85$

Ans: (i) 48 (ii) 85

5. Find $56 - 3$. [1]

Take 3 from the units digit: $6 - 3 = 3$; the tens digit 5 stays.

$$56 - 3 = 53$$

Ans: 53

6. Find $11 - 5$ by the 1st and 2nd methods. [2]

1st method: take 1 out of 5 first ($5 - 1 = 4$): $11 - 5 = 10 - 4 = 6$

2nd method: add 5 to both: $11 - 5 = 16 - 10 = 6$

Both methods give $11 - 5 = 6$

Ans: 6

7. Find $36 - 8$ by three methods. [3]

1st method: take 6 out of 8 first ($8 - 6 = 2$): $36 - 8 = 30 - 2 = 28$

2nd method: add 2 to both: $36 - 8 = 38 - 10 = 28$

3rd method: $36 - 10 = 26$ and $10 - 8 = 2$, so $36 - 8 = 26 + 2 = 28$

All three methods give $36 - 8 = 28$

Ans: 28

8. Find $90 - 80$. [1]

9 tens $-$ 8 tens $=$ 1 ten

$$90 - 80 = 10$$

Ans: 10

9. Find $97 - 78$ by four methods. [5]

1st method (take the tens first): $97 - 78 = 27 - 8 = 20 - 1 = 19$

2nd method: add 2 to both: $97 - 78 = 99 - 80 = 19$

3rd method: $97 - 80 = 17$ and $80 - 78 = 2$, so $97 - 78 = 17 + 2 = 19$

4th method (column): $7 < 8$, so borrow 1 ten: units $17 - 8 = 9$, tens $8 - 7 = 1$

All four methods give $97 - 78 = 19$

Ans: 19

10. Find (i) $490 - 8$ (ii) $467 - 21$. [2]

(i) $490 = 480 + 10$ and $10 - 8 = 2$, so $490 - 8 = 480 + 2 = 482$

(ii) units $7 - 1 = 6$, tens $6 - 2 = 4$, hundreds 4 stays: $467 - 21 = 446$

Ans: (i) 482 (ii) 446

11. Find $271 - 58$ by four methods. [5]

1st method (take the tens first): $271 - 58 = 221 - 8 = 220 - 7 = 213$

2nd method: add 2 to both: $271 - 58 = 273 - 60 = 213$

3rd method: $271 - 60 = 211$ and $60 - 58 = 2$, so $271 - 58 = 211 + 2 = 213$

4th method (column): $1 < 8$, so borrow 1 ten: units $11 - 8 = 3$, tens $6 - 5 = 1$, hundreds 2

All four methods give $271 - 58 = 213$

Ans: 213

12. Find $100 - 65$. [2]

Take away the tens first: $100 - 60 = 40$

$100 - 65 = 40 - 5 = 35$

Ans: 35

13. Find $143 - 57$ by three methods. [5]

1st method (column): units $3 < 7$, borrow 1 ten: $13 - 7 = 6$

tens: $3 < 5$, borrow from the hundred: $13 - 5 = 8$, hundreds 0

2nd method: take 3 from both: $143 - 57 = 140 - 54$

take 40 from both: $= 100 - 14 = 86$

3rd method: $143 - 100 = 43$ and $100 - 57 = 43$, so $143 - 57 = 43 + 43 = 86$

All three methods give $143 - 57 = 86$

Ans: 86

14. Find $10 + 50$. [1]

1 ten + 5 tens = 6 tens

$10 + 50 = 60$

Ans: 60

15. Find $45 + 31$ by adding the tens and then the units. [2]

Tens: $40 + 30 = 70$

Units: $5 + 1 = 6$

$45 + 31 = 70 + 6 = 76$

Ans: 76

16. Find $7016 \div 8$ by long division. [3]

$70 \div 8: 8 \times 8 = 64, 70 - 64 = 6$

Bring down 1, we have 61: $8 \times 7 = 56, 61 - 56 = 5$

Bring down 6, we have 56: $8 \times 7 = 56, 56 - 56 = 0$

Remainder 0, so $7016 \div 8 = 877$

Ans: 877

17. Find $6839904 \div 2$ by long division. [5]

$6 \div 2: 2 \times 3 = 6, 6 - 6 = 0$

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

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

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

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

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

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

Remainder 0, so $6839904 \div 2 = 3419952$

Ans: 3419952

18. Find $72656 \div 8$ by long division. [3]

$72 \div 8: 8 \times 9 = 72, 72 - 72 = 0$

Bring down 6, we have 6: $6 < 8$, so write 0 in the quotient

Bring down 5, we have 65: $8 \times 8 = 64, 65 - 64 = 1$

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

Remainder 0, so $72656 \div 8 = 9082$

Do not miss the 0 in the quotient.

Ans: 9082

19. Find $4818 \div 11$ by long division. [3]

$48 \div 11: 11 \times 4 = 44, 48 - 44 = 4$

Bring down 1, we have 41: $11 \times 3 = 33, 41 - 33 = 8$

Bring down 8, we have 88: $11 \times 8 = 88, 88 - 88 = 0$

Remainder 0, so $4818 \div 11 = 438$

Ans: 438

20. Find $\frac{24}{4}$. [1]

$\frac{24}{4}$ means $24 \div 4$.

$4 \times 6 = 24$, so $\frac{24}{4} = 6$

Ans: 6
