

Basic Operations

Question Paper, Set 05

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) $8 + 2$ (ii) $7 - 1$. | [1 mark] |
| 2. Fill in the box and find the sum: $4 + 7 = 10 + \square$. | [2 marks] |
| 3. Find the number in the box: $2 + \square = 9$. | [1 mark] |
| 4. Find (i) $20 - 2$ (ii) $60 - 2$. | [2 marks] |
| 5. Find $88 - 7$. | [1 mark] |
| 6. Find $11 - 2$ by the 1st and 2nd methods. | [2 marks] |
| 7. Find $87 - 9$ by three methods. | [3 marks] |
| 8. Find $80 - 50$. | [1 mark] |
| 9. Find $41 - 16$ by four methods. | [5 marks] |
| 10. Find (i) $410 - 6$ (ii) $386 - 11$. | [2 marks] |
| 11. Find $192 - 25$ by four methods. | [5 marks] |
| 12. Find $100 - 67$. | [2 marks] |
| 13. Find $144 - 78$ by three methods. | [5 marks] |
| 14. Find $20 + 30$. | [1 mark] |
| 15. Find $63 + 65$ by adding the tens and then the units. | [2 marks] |
| 16. Find $2200 \div 8$ by long division. | [3 marks] |
| 17. Find $2371078 \div 2$ by long division. | [5 marks] |
| 18. Find $3219 \div 3$ by long division. | [3 marks] |
| 19. Find $5244 \div 12$ by long division. | [3 marks] |
| 20. Find $\frac{36}{4}$. | [1 mark] |

Key sheet

Q	Answer
1	(i) 10 (ii) 6
2	$\square = 1$; $4 + 7 = 11$
3	7
4	(i) 18 (ii) 58
5	81
6	9
7	78
8	30
9	25
10	(i) 404 (ii) 375
11	167
12	33
13	66
14	50
15	128
16	275
17	1185539
18	1073
19	437
20	9

Solutions

1. Find (i) $8 + 2$ (ii) $7 - 1$. [1]

(i) Start at 8 and count on 2: $8 + 2 = 10$

(ii) Count back 1 from 7: $7 - 1 = 6$

Ans: (i) 10 (ii) 6

2. Fill in the box and find the sum: $4 + 7 = 10 + \square$. [2]

7 needs 3 to make 10; take 3 from 4, which leaves 1.

$$4 + 7 = 10 + 1 = 11$$

Ans: $\square = 1$; $4 + 7 = 11$

3. Find the number in the box: $2 + \square = 9$. [1]

$$\square = 9 - 2 = 7$$

$$\text{Check: } 2 + 7 = 9$$

Ans: 7

4. Find (i) $20 - 2$ (ii) $60 - 2$. [2]

(i) $20 = 10 + 10$ and $10 - 2 = 8$, so $20 - 2 = 10 + 8 = 18$

(ii) $60 = 50 + 10$ and $10 - 2 = 8$, so $60 - 2 = 50 + 8 = 58$

Ans: (i) 18 (ii) 58

5. Find $88 - 7$. [1]

Take 7 from the units digit: $8 - 7 = 1$; the tens digit 8 stays.

$$88 - 7 = 81$$

Ans: 81

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

1st method: take 1 out of 2 first ($2 - 1 = 1$): $11 - 2 = 10 - 1 = 9$

2nd method: add 8 to both: $11 - 2 = 19 - 10 = 9$

Both methods give $11 - 2 = 9$

Ans: 9

7. Find $87 - 9$ by three methods. [3]

1st method: take 7 out of 9 first ($9 - 7 = 2$): $87 - 9 = 80 - 2 = 78$

2nd method: add 1 to both: $87 - 9 = 88 - 10 = 78$

3rd method: $87 - 10 = 77$ and $10 - 9 = 1$, so $87 - 9 = 77 + 1 = 78$

All three methods give $87 - 9 = 78$

Ans: 78

8. Find $80 - 50$. [1]

8 tens $-$ 5 tens $=$ 3 tens

$$80 - 50 = 30$$

Ans: 30

9. Find $41 - 16$ by four methods. [5]

1st method (take the tens first): $41 - 16 = 31 - 6 = 30 - 5 = 25$

2nd method: add 4 to both: $41 - 16 = 45 - 20 = 25$

3rd method: $41 - 20 = 21$ and $20 - 16 = 4$, so $41 - 16 = 21 + 4 = 25$

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

All four methods give $41 - 16 = 25$

Ans: 25

10. Find (i) $410 - 6$ (ii) $386 - 11$. [2]

(i) $410 = 400 + 10$ and $10 - 6 = 4$, so $410 - 6 = 400 + 4 = 404$

(ii) units $6 - 1 = 5$, tens $8 - 1 = 7$, hundreds 3 stays: $386 - 11 = 375$

Ans: (i) 404 (ii) 375

11. Find $192 - 25$ by four methods. [5]

1st method (take the tens first): $192 - 25 = 172 - 5 = 170 - 3 = 167$

2nd method: add 5 to both: $192 - 25 = 197 - 30 = 167$

3rd method: $192 - 30 = 162$ and $30 - 25 = 5$, so $192 - 25 = 162 + 5 = 167$

4th method (column): $2 < 5$, so borrow 1 ten: units $12 - 5 = 7$, tens $8 - 2 = 6$, hundreds 1

All four methods give $192 - 25 = 167$

Ans: 167

12. Find $100 - 67$. [2]

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

$100 - 67 = 40 - 7 = 33$

Ans: 33

13. Find $144 - 78$ by three methods. [5]

1st method (column): units $4 < 8$, borrow 1 ten: $14 - 8 = 6$

tens: $3 < 7$, borrow from the hundred: $13 - 7 = 6$, hundreds 0

2nd method: take 4 from both: $144 - 78 = 140 - 74$

take 40 from both: $= 100 - 34 = 66$

3rd method: $144 - 100 = 44$ and $100 - 78 = 22$, so $144 - 78 = 44 + 22 = 66$

All three methods give $144 - 78 = 66$

Ans: 66

14. Find $20 + 30$. [1]

2 tens + 3 tens = 5 tens

$20 + 30 = 50$

Ans: 50

15. Find $63 + 65$ by adding the tens and then the units. [2]

Tens: $60 + 60 = 120$

Units: $3 + 5 = 8$

$63 + 65 = 120 + 8 = 128$

Ans: 128

16. Find $2200 \div 8$ by long division. [3]

$22 \div 8: 8 \times 2 = 16, 22 - 16 = 6$

Bring down 0, we have 60: $8 \times 7 = 56, 60 - 56 = 4$

Bring down 0, we have 40: $8 \times 5 = 40, 40 - 40 = 0$

Remainder 0, so $2200 \div 8 = 275$

Ans: 275

17. Find $2371078 \div 2$ by long division. [5]

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

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

Bring down 7, we have 17: $2 \times 8 = 16, 17 - 16 = 1$

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

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

Bring down 7, we have 7: $2 \times 3 = 6, 7 - 6 = 1$

Bring down 8, we have 18: $2 \times 9 = 18, 18 - 18 = 0$

Remainder 0, so $2371078 \div 2 = 1185539$

Ans: 1185539

18. Find $3219 \div 3$ by long division. [3]

$3 \div 3: 3 \times 1 = 3, 3 - 3 = 0$

Bring down 2, we have 2: $2 < 3$, so write 0 in the quotient

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

Bring down 9, we have 9: $3 \times 3 = 9, 9 - 9 = 0$

Remainder 0, so $3219 \div 3 = 1073$

Do not miss the 0 in the quotient.

Ans: 1073

19. Find $5244 \div 12$ by long division. [3]

$52 \div 12: 12 \times 4 = 48, 52 - 48 = 4$

Bring down 4, we have 44: $12 \times 3 = 36, 44 - 36 = 8$

Bring down 4, we have 84: $12 \times 7 = 84, 84 - 84 = 0$

Remainder 0, so $5244 \div 12 = 437$

Ans: 437

20. Find $\frac{36}{4}$. [1]

$\frac{36}{4}$ means $36 \div 4$.

$4 \times 9 = 36$, so $\frac{36}{4} = 9$

Ans: 9
