

BODMAS for Class 5 — Order of Operations

Unit: Operations - Student Practice Worksheet

Overview: Ms. Rao wrote $2 + 3 \times 4$ on the board and asked for the answer. Half the class said 20. The other half said 14. Both halves had done their arithmetic perfectly.

Practice Questions (30 Total)

Section A - Easy

Q1. Maroon box 3×4 , then add 2. Value?

2 +

3×4

- ☐ A. 14
- ☐ B. 20
- ☐ C. 24
- ☐ D. 9

Q2. Compute $8 - 4 + 2$

- ☐ A. 2
- ☐ B. 6
- ☐ C. 10
- ☐ D. 14

Q3. Compute $10 - 2 \times 3$

- ☐ A. 24
- ☐ B. 4
- ☐ C. 8
- ☐ D. 6

Q4. Maroon bracket $(2+3)$, then 20 divided by that. Value?

$20 \div$

$(2 + 3)$

- ☐ A. 13
- ☐ B. 10
- ☐ C. 5
- ☐ D. 4

Q5. Compute $12 \div 4 + 2$

- ☐ A. 2
- ☐ B. 6
- ☐ C. 3
- ☐ D. 5

Q6. Compute $9 - 3 \times 2$

- ☐ A. 12
- ☐ B. 6
- ☐ C. 3
- ☐ D. 18

Q7. Teal box $5 \div 5$, then add 5. Value?

$5 +$

$5 \div 5$

- ☐ A. 6
- ☐ B. 2
- ☐ C. 1
- ☐ D. 10

Q8. Compute $(10 - 4) \div 2$

- ☐ A. 8
- ☐ B. 3
- ☐ C. 5
- ☐ D. 2

Q9. Compute $3 \times 4 \div 2$

- ☐ A. 24
- ☐ B. 1
- ☐ C. 6
- ☐ D. 12

Q10. Compute $6 + 2 \times 5$, naming which operation runs first and why.

- ☐ A. 16
- ☐ B. 40
- ☐ C. 20
- ☐ D. 13

Section B - Medium

Q11. Teal $36 \div 6$ plus maroon 4×2 . Value?

$$36 \div 6$$

+

$$4 \times 2$$

- ☐ A. 14
- ☐ B. 12
- ☐ C. 20
- ☐ D. 36

Q12. Compute $48 \div 8 \div 2$

- ☐ A. 12
- ☐ B. 3
- ☐ C. 6
- ☐ D. 24

Q13. Compute $12 + 6 \div 3 \times 2$

- ☐ A. 13
- ☐ B. 16
- ☐ C. 12
- ☐ D. 36

Q14. Both brackets first: $(15+5) \div (2+2)$. Value?

$(15+5)$

$\div$

$(2+2)$

- ☐ A. 22
- ☐ B. 18
- ☐ C. 12
- ☐ D. 5

Q15. Compute $100 - 20 \times 3 + 10$

- ☐ A. 250
- ☐ B. 30
- ☐ C. 50
- ☐ D. 70

Q16. Compute $2 + 3 \times (4 + 1)$

- ☐ A. 25
- ☐ B. 21
- ☐ C. 17
- ☐ D. 15

Q17. Maroon $(8-3)$, times 5, then plus 7. Value?

$5 \times$

$(8-3)$

$+ 7$

- ☐ A. 60
- ☐ B. 32
- ☐ C. 42
- ☐ D. 45

Q18. Compute $60 \div (5 \times 3) + 4$

- ☐ A. 40
- ☐ B. 12
- ☐ C. 36

☐ D. 8

Q19. Compute $8 \times 3 - 12 \div 4$

☐ A. 21

☐ B. 3

☐ C. 9

☐ D. 24

Q20. Compute $25 - (3+2) \times 4$, peeling the bracket then the multiply.

☐ A. 88

☐ B. 5

☐ C. 20

☐ D. 15

Section C - Challenge

Q21. Work $120 \div [10 \times \{5 - (3 - 1)\}]$ from the inside out.

$$120 \div [10 \times \{5 - (3 - 1)\}]$$

innermost first

☐ A. 4

☐ B. 6

☐ C. 40

☐ D. 2

Q22. Why is $8 - 4 + 2$ equal to 6 and not 2?

☐ A. Because subtraction always beats addition

☐ B. Because they share a level, so it runs left to right

☐ C. Because BODMAS puts A before S

☐ D. Because there are no brackets

Q23. Compute $36 \div [6 + \{12 \div (2 + 2)\}]$

☐ A. 6

☐ B. 4

☐ C. 9

☐ D. 3

Q24. Teal $[24 - (6+2)]$, then times 3. Value?

$$[24 - (6+2)] \times 3$$

☐ A. 64

☐ B. 22

☐ C. 48

☐ D. 54

Q25. Where must brackets go to make $2 + 3 \times 4$ equal 20?

☐ A. $2 + (3 \times 4)$

☐ B. $(2 + 3) \times 4$

☐ C. $(2 + 3 \times 4)$

☐ D. $2 + 3 \times (4)$

Q26. Compute $2 \times [15 - \{8 - (3 + 2)\}]$

☐ A. 20

☐ B. 36

☐ C. 16

☐ D. 24

Q27. Peel $50 - [20 - \{10 - (5 - 3)\}]$ one layer at a time.

$$50 - [20 - \{10 - (5 - 3)\}]$$

peel one layer at a time

☐ A. 38

☐ B. 22

☐ C. 42

☐ D. 28

Q28. Where must brackets go to make $12 - 6 \div 3$ equal 2?

☐ A. $12 - (6 \div 3)$

☐ B. $(12 - 6 \div 3)$

☐ C. $12 - 6 \div (3)$

☐ D. $(12 - 6) \div 3$

Q29. Compute $(18 \div 3) \times (4 + 2) - 10$

☐ A. 16

☐ B. 26

☐ C. 36

☐ D. 20

Q30. Compute $5 + [30 \div \{2 \times (8 - 5)\}]$, naming each inner result.

☐ A. 15

☐ B. 12

☐ C. 10

☐ D. 8

Answer Key

Q1: (A) (a) 14. Multiplication is settled before addition. Option (b) is the left-to-right answer, which needs brackets to be correct.

Q2: (B) (b) 6. Addition and subtraction share a level, so go left to right. Option (a) is the classic error of doing the addition first.

Q3: (B) (b) 4. Multiply first to get 6, then subtract. Option (a) subtracts first and then multiplies.

Q4: (D) (d) 4. The bracket is worked first, giving $20 \div 5$. Option (a) divides before opening the bracket.

Q5: (D) (d) 5. Divide first to get 3, then add 2. Option (a) adds first and divides after.

Q6: (C) (c) 3. Multiply first to get 6, then $9 - 6$. Option (a) subtracts first and then multiplies.

Q7: (A) (a) 6. The division happens first, giving $5 + 1$. Option (b) adds first, which the rule does not allow here.

Q8: (B) (b) 3. The bracket gives 6, then $6 \div 2$. Option (a) divides before subtracting.

Q9: (C) (c) 6. Multiplication and division share a level, so left to right: $12 \div 2$.

Q10: (A) (a) 16. Multiply first to get 10, then add 6. Option (b) adds first.

Q11: (A) (a) 14. Both the division and the multiplication are settled first, giving $6 + 8$.

Q12: (B) (b) 3. Two divisions share a level, so left to right: $48 \div 8 = 6$, then $6 \div 2$. Option (a) does the right-hand division first.

Q13: (B) (b) 16. Division and multiplication run left to right: $6 \div 3 = 2$, then $2 \times 2 = 4$, then add 12. Option (a) multiplies before dividing.

Q14: (D) (d) 5. Both brackets are worked first, giving $20 \div 4$.

Q15: (C) (c) 50. Multiply first to get 60, then work the additions and subtractions left to right: $100 - 60 + 10$. Option (d) does the addition before the subtraction.

Q16: (C) (c) 17. Bracket gives 5, then $3 \times 5 = 15$, then add 2. Option (a) adds the 2 before multiplying.

Q17: (B) (b) 32. Bracket gives 5, then $5 \times 5 = 25$, then add 7. Option (a) adds the 7 inside the bracket.

Q18: (D) (d) 8. The bracket gives 15, then $60 \div 15 = 4$, then add 4. Option (a) divides by 5 before multiplying.

Q19: (A) (a) 21. Multiply and divide first, giving $24 - 3$. Option (b) works strictly left to right.

Q20: (B) (b) 5. Bracket first gives 5, then $5 \times 4 = 20$, then $25 - 20$. Option (a) subtracts before multiplying.

Q21: (A) (a) 4. Innermost first: $3 - 1 = 2$, then $5 - 2 = 3$, then $10 \times 3 = 30$, then $120 \div 30$.

Q22: (B) (b) Because they share a level, so it runs left to right. Option (c) is the misreading that produces 2 — the six letters are only four levels.

Q23: (B) (b) 4. Work outwards: $2 + 2 = 4$, then $12 \div 4 = 3$, then $6 + 3 = 9$, then $36 \div 9$.

Q24: (C) (c) 48. Inner bracket gives 8, then $24 - 8 = 16$, then 16×3 .

Q25: (B) (b) $(2 + 3) \times 4$. Only this forces the addition first. Options (a), (c) and (d) all still give 14.

Q26: (D) (d) 24. Innermost gives 5, then $8 - 5 = 3$, then $15 - 3 = 12$, then 2×12 .

Q27: (A) (a) 38. Innermost gives 2, then $10 - 2 = 8$, then $20 - 8 = 12$, then $50 - 12$.

Q28: (D) (d) $(12 - 6) \div 3$. That gives $6 \div 3 = 2$. Without brackets the line is $12 - 2 = 10$.

Q29: (B) (b) 26. Both brackets first give 6 and 6, then $6 \times 6 = 36$, then subtract 10.

Q30: (C) (c) 10. Innermost gives 3, then $2 \times 3 = 6$, then $30 \div 6 = 5$, then $5 + 5$.

You've got this! Keep learning and shining! - Ruchi Math Coaching