BODMAS for Class 5 — Order of Operations

Unit: Operations - Student Practice Worksheet

Overview: Ms. Rao wrote 2 + 3 × 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 × 3

- [ ] **A.** 24
- [ ] **B.** 4
- [ ] **C.** 8
- [ ] **D.** 6

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

20 ÷ (2 + 3)

- [ ] **A.** 13
- [ ] **B.** 10
- [ ] **C.** 5
- [ ] **D.** 4

Q5. Compute 12 ÷ 4 + 2

- [ ] **A.** 2
- [ ] **B.** 6
- [ ] **C.** 3
- [ ] **D.** 5

Q6. Compute 9 – 3 × 2

- [ ] **A.** 12
- [ ] **B.** 6
- [ ] **C.** 3
- [ ] **D.** 18

Q7. Teal box 5 ÷ 5, then add 5. Value?

5 + 5 ÷ 5

- [ ] **A.** 6
- [ ] **B.** 2
- [ ] **C.** 1
- [ ] **D.** 10

Q8. Compute (10 – 4) ÷ 2

- [ ] **A.** 8
- [ ] **B.** 3
- [ ] **C.** 5
- [ ] **D.** 2

Q9. Compute 3 × 4 ÷ 2

- A. 24
- B. 1
- C. 6
- D. 12

Q10. Compute 6 + 2 × 5, naming which operation runs first and why.

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

Section B - Medium

Q11. Teal 36÷6 plus maroon 4×2. Value?

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

Q12. Compute 48 ÷ 8 ÷ 2

- A. 12
- B. 3
- C. 6
- D. 24

Q13. Compute 12 + 6 ÷ 3 × 2

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

Q14. Both brackets first: (15+5) ÷ (2+2). Value?

(15+5) ÷ (2+2)

- [ ] **A.** 22
- [ ] **B.** 18
- [ ] **C.** 12
- [ ] **D.** 5

Q15. Compute 100 – 20 × 3 + 10

- [ ] **A.** 250
- [ ] **B.** 30
- [ ] **C.** 50
- [ ] **D.** 70

Q16. Compute 2 + 3 × (4 + 1)

- [ ] **A.** 25
- [ ] **B.** 21
- [ ] **C.** 17
- [ ] **D.** 15

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

5 × (8 – 3) + 7

- [ ] **A.** 60
- [ ] **B.** 32
- [ ] **C.** 42
- [ ] **D.** 45

Q18. Compute 60 ÷ (5 × 3) + 4

- [ ] **A.** 40
- [ ] **B.** 12
- [ ] **C.** 36

- [ ] **D.** 8

Q19. Compute 8 × 3 – 12 ÷ 4

- [ ] **A.** 21
- [ ] **B.** 3
- [ ] **C.** 9
- [ ] **D.** 24

Q20. Compute 25 – (3+2) × 4, peeling the bracket then the multiply.

- [ ] **A.** 88
- [ ] **B.** 5
- [ ] **C.** 20
- [ ] **D.** 15

Section C - Challenge

Q21. Work 120 ÷ [10 × {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 ÷ [6 + {12 ÷ (2 + 2)}]

- [ ] **A.** 6
- [ ] **B.** 4
- [ ] **C.** 9

- [ ] **D.** 3

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

[24 – (6+2)] × 3

- [ ] **A.** 64
- [ ] **B.** 22
- [ ] **C.** 48
- [ ] **D.** 54

Q25. Where must brackets go to make 2 + 3 × 4 equal 20?

- [ ] **A.** 2 + (3 × 4)
- [ ] **B.** (2 + 3) × 4
- [ ] **C.** (2 + 3 × 4)
- [ ] **D.** 2 + 3 × (4)

Q26. Compute 2 × [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 ÷ 3 equal 2?

- [ ] **A.** 12 – (6 ÷ 3)

- [ ] **B.** (12 – 6 ÷ 3)
- [ ] **C.** 12 – 6 ÷ (3)
- [ ] **D.** (12 – 6) ÷ 3

Q29. Compute (18 ÷ 3) × (4 + 2) – 10

- [ ] **A.** 16
- [ ] **B.** 26
- [ ] **C.** 36
- [ ] **D.** 20

Q30. Compute 5 + [30 ÷ {2 × (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 ÷ 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 ÷ 2. Option (a) divides before subtracting.

Q9: (C) (c) 6. Multiplication and division share a level, so left to right: 12 ÷ 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 ÷ 8 = 6, then 6 ÷ 2. Option (a) does the right-hand division first.

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

Q14: (D) (d) 5. Both brackets are worked first, giving 20 ÷ 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 × 5 = 15, then add 2. Option (a) adds the 2 before multiplying.

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

Q18: (D) (d) 8. The bracket gives 15, then 60 ÷ 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 × 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 × 3 = 30, then 120 ÷ 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 ÷ 4 = 3, then 6 + 3 = 9, then 36 ÷ 9.

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

Q25: (B) (b) (2 + 3) × 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) ÷ 3. That gives 6 ÷ 3 = 2. Without brackets the line is 12 – 2 = 10.

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

Q30: (C) (c) 10. Innermost gives 3, then 2 × 3 = 6, then 30 ÷ 6 = 5, then 5 + 5.

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