Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 1 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. 14 + [6 × (19 + 2)] = **140**
2. 3 × [(4 + 9) + 6] = **57**
3. [10 × (19 – 1)] × 2 = **360**
4. 6 – [3 ÷ (3 – 2)] = **3**
5. 15 + [15 × (19 + 4)] = **360**
6. 12 + [13 × (6 – 2)] = **64**

Part B: Parentheses, brackets and braces

7. {2 + [9 × (19 × 5)]} + 9 = **866**
8. {13 × [(19 + 1) – 10]} – 14 = **116**
9. {14 + [(19 × 5) – 7]} + 12 = **114**
10. 11 + {3 + [(5 + 1) × 2]} = **26**
11. {5 × [5 × (16 – 10)]} – 7 = **143**
12. {13 ÷ [5 + (14 – 6)]} × 6 = **6**
13. {[12 ÷ (3 – 2)] – 5} + 5 = **12**
14. {[(4 + 8) × 13] ÷ 13} ÷ 6 = **2**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 2 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. $14 + [(14 \times 2) \times 4] =$ **126**
2. $11 + [(9 + 5) - 5] =$ **20**
3. $12 + [(11 - 9) \times 9] =$ **30**
4. $[(12 + 10) \div 11] + 4 =$ **6**
5. $8 + [(16 + 7) \times 15] =$ **353**
6. $5 - [(3 \times 12) \div 12] =$ **2**

Part B: Parentheses, brackets and braces

7. $7 + \{[4 \times (7 - 5)] - 4\} =$ **11**
8. $\{[(13 \div 1) + 14] + 15\} + 13 =$ **55**
9. $\{7 + [11 - (12 - 11)]\} - 7 =$ **10**
10. $12 + \{10 + [15 \times (15 + 6)]\} =$ **337**
11. $2 + \{8 \times [9 + (16 + 7)]\} =$ **258**
12. $3 \times \{[7 + (10 + 5)] + 7\} =$ **87**
13. $\{[15 + (13 + 10)] \times 8\} + 13 =$ **317**
14. $\{8 + [(11 + 12) + 9]\} \div 4 =$ **10**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 3 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [3 + (2 × 1)] + 6 = **11**
2. 6 × [6 + (10 ÷ 1)] = **96**
3. 14 + [4 × (7 × 2)] = **70**
4. [15 ÷ (5 ÷ 5)] × 4 = **60**
5. [(17 × 8) – 13] ÷ 3 = **41**
6. [7 × (13 × 3)] ÷ 13 = **21**

Part B: Parentheses, brackets and braces

7. 3 + {[(16 – 10) + 11] + 11} = **31**
8. {[3 + (20 – 6)] × 3} + 10 = **61**
9. {[10 + (16 × 4)] – 14} – 6 = **54**
10. 15 + {[(10 + 1) × 6] ÷ 3} = **37**
11. 5 + {4 ÷ [4 × (8 – 7)]} = **6**
12. {[(3 + 3) × 7] – 2} × 4 = **160**
13. 11 + {[(5 + 8) + 7] + 14} = **45**
14. 2 × {[(4 × 8) × 4] ÷ 2} = **128**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 4 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. $6 - [(14 - 2) - 11] =$ **5**
2. $5 + [(17 \times 7) + 10] =$ **134**
3. $[15 - (9 - 3)] \times 8 =$ **72**
4. $15 + [(12 + 1) + 14] =$ **42**
5. $[11 + (11 \times 4)] + 13 =$ **68**
6. $[9 \times (16 - 9)] - 8 =$ **55**

Part B: Parentheses, brackets and braces

7. $\{[(15 - 9) + 8] + 12\} - 3 =$ **23**
8. $\{9 + [(6 + 6) + 8]\} + 3 =$ **32**
9. $5 \times \{[8 + (14 - 6)] \times 5\} =$ **400**
10. $\{10 \times [9 \times (18 - 12)]\} - 10 =$ **530**
11. $\{9 - [(8 \times 7) \div 14]\} + 11 =$ **16**
12. $\{7 - [10 - (7 + 2)]\} \times 10 =$ **60**
13. $\{7 + [15 + (14 + 9)]\} - 10 =$ **35**
14. $\{6 \times [6 + (4 \times 5)]\} + 13 =$ **169**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 5 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [(10 ÷ 1) + 5] × 6 = **90**
2. [2 + (2 × 2)] + 6 = **12**
3. [6 × (16 × 1)] + 8 = **104**
4. [(5 + 1) ÷ 6] + 11 = **12**
5. 2 + [(17 + 3) – 14] = **8**
6. 15 × [(8 × 3) ÷ 2] = **180**

Part B: Parentheses, brackets and braces

7. {[(19 – 9) × 5] + 6} – 3 = **53**
8. 12 × {[3 ÷ (6 ÷ 2)] × 15} = **180**
9. 15 + {[2 + (3 × 12)] – 4} = **49**
10. 2 × {8 × [10 + (7 + 12)]} = **464**
11. {10 + [7 + (5 × 3)]} ÷ 8 = **4**
12. {[11 × (13 + 11)] + 6} – 13 = **257**
13. 4 + {[(3 × 3) – 3] + 5} = **15**
14. 4 × {[(11 × 3) + 5] – 12} = **104**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 6 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [8 + (6 + 3)] – 13 = **4**
2. [(9 + 8) + 4] + 11 = **32**
3. [(19 + 4) – 6] + 10 = **27**
4. [(2 + 9) + 8] + 9 = **28**
5. [15 + (10 + 9)] + 7 = **41**
6. 5 + [(2 ÷ 2) + 7] = **13**

Part B: Parentheses, brackets and braces

7. 2 × {4 ÷ [(10 – 5) ÷ 5]} = **8**
8. 5 + {5 × [(8 ÷ 1) – 7]} = **10**
9. 9 × {11 + [2 + (5 × 1)]} = **162**
10. 6 + {4 × [10 + (7 × 8)]} = **270**
11. 12 + {14 + [11 × (18 – 9)]} = **125**
12. 10 + {[12 × (11 ÷ 1)] – 9} = **133**
13. {[10 – (9 ÷ 9)] × 6} – 7 = **47**
14. {[2 + (6 ÷ 2)] × 8} + 15 = **55**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 7 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [(15 – 12) + 8] + 4 = **15**
2. [(19 × 5) – 15] – 2 = **78**
3. [8 + (8 + 8)] – 2 = **22**
4. 8 + [8 × (8 + 6)] = **120**
5. [(7 × 10) – 15] × 10 = **550**
6. [(9 + 4) + 10] × 4 = **92**

Part B: Parentheses, brackets and braces

7. {[14 × (10 × 1)] + 3} + 7 = **150**
8. {[(20 ÷ 2) + 3] × 13} + 6 = **175**
9. 3 + {[(13 × 12) ÷ 12] × 15} = **198**
10. {[4 × (16 × 7)] – 7} – 15 = **426**
11. {[(3 + 12) + 10] – 4} + 15 = **36**
12. {[(6 + 11) × 4] ÷ 4} + 13 = **30**
13. {11 + [(10 – 6) + 12]} × 15 = **405**
14. 8 + {[11 × (8 + 9)] × 4} = **756**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 8 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [4 + (16 – 3)] + 9 = **26**
2. [(7 + 4) – 8] × 8 = **24**
3. 12 ÷ [5 ÷ (15 ÷ 3)] = **12**
4. [(10 – 2) + 12] – 14 = **6**
5. [(16 + 10) – 5] – 8 = **13**
6. 9 + [(15 × 2) – 11] = **28**

Part B: Parentheses, brackets and braces

7. {3 × [(9 × 9) + 9]} – 7 = **263**
8. {6 + [(18 + 6) × 14]} – 6 = **336**
9. 4 + {[(10 + 10) + 7] – 8} = **23**
10. {[14 × (5 × 10)] ÷ 2} + 3 = **353**
11. {5 × [13 × (9 – 2)]} + 2 = **457**
12. 2 × {[(20 + 6) + 7] × 7} = **462**
13. {7 + [(19 – 3) × 14]} – 8 = **223**
14. 12 + {13 + [(5 + 8) + 12]} = **50**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 9 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. 9 + [(2 × 8) – 6] = **19**
2. 15 + [8 + (7 + 1)] = **31**
3. [(8 × 7) + 5] × 9 = **549**
4. [12 ÷ (9 – 7)] × 6 = **36**
5. 7 + [(5 × 6) + 2] = **39**
6. 5 × [7 × (3 + 6)] = **315**

Part B: Parentheses, brackets and braces

7. {5 + [(17 – 4) – 9]} × 15 = **135**
8. {2 + [(18 × 8) ÷ 4]} + 4 = **42**
9. 2 × {10 × [(20 – 8) ÷ 2]} = **120**
10. {5 + [(6 – 2) – 2]} × 13 = **91**
11. 4 + {14 + [7 × (9 – 6)]} = **39**
12. {[(17 + 10) – 11] – 7} + 2 = **11**
13. 6 × {5 + [13 + (17 + 5)]} = **240**
14. {4 + [(11 × 8) – 14]} × 9 = **702**

Order of Operations With Parentheses, Brackets and Braces - ANSWER KEY

Grade 5 | Evaluating expressions with nested parentheses, brackets and braces | Version 10 of 10

Evaluate. Work from the inside out: parentheses ( ), then brackets [ ], then braces { }. Inside each, multiply and divide from left to right, then add and subtract.

Part A: Parentheses and brackets

1. [9 ÷ (3 × 1)] × 10 = **30**
2. 12 + [(9 × 2) – 6] = **24**
3. 9 + [(3 + 1) × 13] = **61**
4. [(19 – 4) × 14] – 15 = **195**
5. 9 × [(17 + 4) + 7] = **252**
6. 3 + [(15 × 9) ÷ 9] = **18**

Part B: Parentheses, brackets and braces

7. {[10 ÷ (13 – 12)] – 6} + 12 = **16**
8. 5 + {[15 + (6 × 10)] + 13} = **93**
9. 2 + {[10 + (14 – 5)] × 6} = **116**
10. 15 × {6 + [(16 + 8) + 15]} = **675**
11. {9 + [(5 × 8) – 9]} × 3 = **120**
12. {15 ÷ [15 ÷ (5 × 3)]} × 15 = **225**
13. {[(9 ÷ 3) × 6] – 3} – 3 = **12**
14. 13 + {2 + [(3 + 6) × 6]} = **69**