Name: _____
Date: _____ Score: ___ / 10

1. $2 \times (4 + 5) - 5$ = _____

2. $(5 + 4) \times 7$ = _____

WORKSPACE:

3. $4 \times (6 + 4) - 36$ = _____

WORKSPACE:

4. $(2 + 9) \times 5$ = _____

WORKSPACE:

5. $(4 + 4) \times 2$ = _____

WORKSPACE:

6. $(12 + 23) \div 5 + 8$ = _____

WORKSPACE:

7. $(7 + 7) \times 4$ = _____

WORKSPACE:

8. $(1 + 34) \div 5 + 7$ = _____

WORKSPACE:

9. $(2 - 1) \times 4 + 10$ = _____

WORKSPACE:

10. $(17 + 7) \div 6 + 9$ = _____

WORKSPACE:

1. $2 \times (4 + 5) - 5$ = 13

1. Parentheses: (4 + 5) = 9
2. Multiply: 2 × 9 = 18
3. Subtract: 18 − 5 = 13

2. $(5 + 4) \times 7$ = 63

1. Parentheses: (5 + 4) = 9
2. Multiply: 9 × 7 = 63

3. $4 \times (6 + 4) - 36$ = 4

1. Parentheses: (6 + 4) = 10
2. Multiply: 4 × 10 = 40
3. Subtract: 40 − 36 = 4

4. $(2 + 9) \times 5$ = 55

1. Parentheses: (2 + 9) = 11
2. Multiply: 11 × 5 = 55

5. $(4 + 4) \times 2$ = 16

1. Parentheses: (4 + 4) = 8
2. Multiply: 8 × 2 = 16

6. $(12 + 23) \div 5 + 8$ = 15

1. Parentheses: (12 + 23) = 35
2. Divide: 35 ÷ 5 = 7
3. Add: 7 + 8 = 15

7. $(7 + 7) \times 4$ = 56

1. Parentheses: (7 + 7) = 14
2. Multiply: 14 × 4 = 56

8. $(1 + 34) \div 5 + 7$ = 14

1. Parentheses: (1 + 34) = 35
2. Divide: 35 ÷ 5 = 7
3. Add: 7 + 7 = 14

9. $(2 - 1) \times 4 + 10$ = 14

1. Parentheses: (2 − 1) = 1
2. Multiply: 1 × 4 = 4
3. Add: 4 + 10 = 14

10. $(17 + 7) \div 6 + 9$ = 13

1. Parentheses: (17 + 7) = 24
2. Divide: 24 ÷ 6 = 4
3. Add: 4 + 9 = 13

Name: _____
Date: _____ Score: ___ / 10

1. **5 − 14** = _____

2. **19 + 12** = _____

WORKSPACE:

3. **14 + 10** = _____

WORKSPACE:

4. **-8 + (-10)** = _____

WORKSPACE:

5. **13 − (-13)** = _____

WORKSPACE:

6. **-15 − (-11)** = _____

WORKSPACE:

7. **-13 + (-5)** = _____

WORKSPACE:

8. **-18 + 7** = _____

WORKSPACE:

9. **10 − 18** = _____

WORKSPACE:

10. **2 − 15** = _____

WORKSPACE:

1. **5 − 14** = -9

1. Rewrite Subtraction as Adding the Opposite: 5 − 14 = 5 + (-14)
2. Apply Integer Addition Rules: |5| with |-14|
3. Result: 5 − 14 = -9 ✅

2. **19 + 12** = 31

1. Same Signs Rule (Positive + Positive): Add absolute values |19| + |12| = 31
2. Keep the Common Sign: Positive (+)
3. Result: 19 + 12 = 31 ✅

3. **14 + 10** = 24

1. Same Signs Rule (Positive + Positive): Add absolute values |14| + |10| = 24
2. Keep the Common Sign: Positive (+)
3. Result: 14 + 10 = 24 ✅

4. **-8 + (-10)** = -18

1. Same Signs Rule (Negative + Negative): Add absolute values |-8| + |-10| = 18
2. Keep the Common Sign: Negative (−)
3. Result: (-8) + (-10) = -18 ✅

5. **13 − (-13)** = 26

1. Rewrite Subtraction as Adding the Opposite: 13 − (-13) = 13 + 13
2. Apply Integer Addition Rules: |13| with |13|
3. Result: 13 − (-13) = 26 ✅

6. **-15 − (-11)** = -4

1. Rewrite Subtraction as Adding the Opposite: (-15) − (-11) = (-15) + 11
2. Apply Integer Addition Rules: |-15| with |11|
3. Result: (-15) − (-11) = -4 ✅

7. **-13 + (-5)** = -18

1. Same Signs Rule (Negative + Negative): Add absolute values |-13| + |-5| = 18
2. Keep the Common Sign: Negative (−)
3. Result: (-13) + (-5) = -18 ✅

8. **-18 + 7** = -11

1. Different Signs Rule: Subtract smaller absolute value from larger |18| − |7| = 11
2. Take Sign of Larger Magnitude: |-18| is larger (Negative (−))
3. Result: (-18) + 7 = -11 ✅

9. **10 − 18** = -8

1. Rewrite Subtraction as Adding the Opposite: 10 − 18 = 10 + (-18)
2. Apply Integer Addition Rules: |10| with |-18|
3. Result: 10 − 18 = -8 ✅

10. **2 − 15** = -13

1. Rewrite Subtraction as Adding the Opposite: 2 − 15 = 2 + (-15)
2. Apply Integer Addition Rules: |2| with |-15|
3. Result: 2 − 15 = -13 ✅

Name: _____
Date: _____ Score: ___ / 10

1. $\sqrt[3]{27}$ = _____

2. $\sqrt[3]{343}$ = _____

WORKSPACE:

WORKSPACE:

3. $\sqrt[3]{729}$ = _____

4. $\sqrt[3]{125}$ = _____

WORKSPACE:

WORKSPACE:

5. $\sqrt[3]{1728}$ = _____

6. $\sqrt[3]{512}$ = _____

WORKSPACE:

WORKSPACE:

7. $\sqrt[3]{216}$ = _____

8. $\sqrt[3]{1331}$ = _____

WORKSPACE:

WORKSPACE:

9. $\sqrt[3]{64}$ = _____

10. $\sqrt[3]{8}$ = _____

WORKSPACE:

WORKSPACE:

1. $\sqrt[3]{27}$ = 3

1. Benchmark Fact: $3^3 = 3 \times 3 \times 3 = 27$
2. Evaluate: $\sqrt[3]{(3^3)} = 3$
3. Value: $\sqrt[3]{27} = 3$ ✅

2. $\sqrt[3]{343}$ = 7

1. Benchmark Fact: $7^3 = 7 \times 7 \times 7 = 343$
2. Evaluate: $\sqrt[3]{(7^3)} = 7$
3. Value: $\sqrt[3]{343} = 7$ ✅

3. $\sqrt[3]{729}$ = 9

1. Benchmark Fact: $9^3 = 9 \times 9 \times 9 = 729$
2. Evaluate: $\sqrt[3]{(9^3)} = 9$
3. Value: $\sqrt[3]{729} = 9$ ✅

4. $\sqrt[3]{125}$ = 5

1. Benchmark Fact: $5^3 = 5 \times 5 \times 5 = 125$
2. Evaluate: $\sqrt[3]{(5^3)} = 5$
3. Value: $\sqrt[3]{125} = 5$ ✅

5. $\sqrt[3]{1728}$ = 12

1. Prime Factorize: $1728 = 2^6 \times 3^3$
2. Group into Triples: $\sqrt[3]{(2^6 \times 3^3)} = 2^2 \times 3$
3. Calculate: $(2^2 \times 3) = 12$

6. $\sqrt[3]{512}$ = 8

1. Benchmark Fact: $8^3 = 8 \times 8 \times 8 = 512$
2. Evaluate: $\sqrt[3]{(8^3)} = 8$
3. Value: $\sqrt[3]{512} = 8$ ✅

7. $\sqrt[3]{216}$ = 6

1. Benchmark Fact: $6^3 = 6 \times 6 \times 6 = 216$
2. Evaluate: $\sqrt[3]{(6^3)} = 6$
3. Value: $\sqrt[3]{216} = 6$ ✅

8. $\sqrt[3]{1331}$ = 11

1. Group into Periods of 3: 1 | 331
2. Tens Digit (1): $1^3 = 1 \leq 1 < 2^3 = 8 \rightarrow$ Tens is 1
3. Units Digit (Ends in 1): 1^3 ends in 1 → Units is 1
4. Combine: (10 + 1) = 11

9. $\sqrt[3]{64}$ = 4

1. Benchmark Fact: $4^3 = 4 \times 4 \times 4 = 64$
2. Evaluate: $\sqrt[3]{(4^3)} = 4$
3. Value: $\sqrt[3]{64} = 4$ ✅

10. $\sqrt[3]{8}$ = 2

1. Benchmark Fact: $2^3 = 2 \times 2 \times 2 = 8$
2. Evaluate: $\sqrt[3]{(2^3)} = 2$
3. Value: $\sqrt[3]{8} = 2$ ✅

Name: _____
Date: _____ Score: ___ / 10

1. $2x - 10 = 4$

WORKSPACE:

2. $5x + 11 = 26$

WORKSPACE:

3. $3x - 2 = 28$

WORKSPACE:

4. $7x - 5 = 30$

WORKSPACE:

5. $2x - 6 = 8$

WORKSPACE:

6. $5x + 6 = 46$

WORKSPACE:

7. $6x + 14 = 32$

WORKSPACE:

8. $3x + 13 = 37$

WORKSPACE:

9. $5x + 11 = 21$

WORKSPACE:

10. $4x + 7 = 23$

WORKSPACE:

1. **2x − 10 = 4** Ans: x = 7

1. Isolate Variable Term: Add 10 to both sides → 2x = 14
2. Divide by Coefficient: x = 14 / 2 → x = 7
3. Proof Check: 2(7) − 10 = 14 − 10 = 4 ✅

2. **5x + 11 = 26** Ans: x = 3

1. Isolate Variable Term: Subtract 11 from both sides → 5x = 15
2. Divide by Coefficient: x = 15 / 5 → x = 3
3. Proof Check: 5(3) + 11 = 15 + 11 = 26 ✅

3. **3x − 2 = 28** Ans: x = 10

1. Isolate Variable Term: Add 2 to both sides → 3x = 30
2. Divide by Coefficient: x = 30 / 3 → x = 10
3. Proof Check: 3(10) − 2 = 30 − 2 = 28 ✅

4. **7x − 5 = 30** Ans: x = 5

1. Isolate Variable Term: Add 5 to both sides → 7x = 35
2. Divide by Coefficient: x = 35 / 7 → x = 5
3. Proof Check: 7(5) − 5 = 35 − 5 = 30 ✅

5. **2x − 6 = 8** Ans: x = 7

1. Isolate Variable Term: Add 6 to both sides → 2x = 14
2. Divide by Coefficient: x = 14 / 2 → x = 7
3. Proof Check: 2(7) − 6 = 14 − 6 = 8 ✅

6. **5x + 6 = 46** Ans: x = 8

1. Isolate Variable Term: Subtract 6 from both sides → 5x = 40
2. Divide by Coefficient: x = 40 / 5 → x = 8
3. Proof Check: 5(8) + 6 = 40 + 6 = 46 ✅

7. **6x + 14 = 32** Ans: x = 3

1. Isolate Variable Term: Subtract 14 from both sides → 6x = 18
2. Divide by Coefficient: x = 18 / 6 → x = 3
3. Proof Check: 6(3) + 14 = 18 + 14 = 32 ✅

8. **3x + 13 = 37** Ans: x = 8

1. Isolate Variable Term: Subtract 13 from both sides → 3x = 24
2. Divide by Coefficient: x = 24 / 3 → x = 8
3. Proof Check: 3(8) + 13 = 24 + 13 = 37 ✅

9. **5x + 11 = 21** Ans: x = 2

1. Isolate Variable Term: Subtract 11 from both sides → 5x = 10
2. Divide by Coefficient: x = 10 / 5 → x = 2
3. Proof Check: 5(2) + 11 = 10 + 11 = 21 ✅

10. **4x + 7 = 23** Ans: x = 4

1. Isolate Variable Term: Subtract 7 from both sides → 4x = 16
2. Divide by Coefficient: x = 16 / 4 → x = 4
3. Proof Check: 4(4) + 7 = 16 + 7 = 23 ✅