



Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Math Worksheet for 7th Grade

Properties of addition & subtraction

Questions

1. Simplify: $(-3) + 7 + (-5)$.
2. Use the associative property to simplify: $[(-8) + 6] + 2$.
3. Rewrite using the commutative property and simplify: $(-4) + 9 + 2$.
4. Evaluate: $5 + (-12) + 7$.
5. Simplify by grouping friendly numbers: $(-15) + 10 + 8$.
6. Is the commutative property valid for addition with negative numbers? Briefly explain.
7. Rewrite $6 + (-3) + (-9)$ using commutative property so negatives are together, then simplify.
8. Use the associative property to show these are equal: $(2 + (-7)) + 5$ and $2 + ((-7) + 5)$. Then simplify.
9. Simplify: $(-10) + (-4) + 6$.
10. Evaluate: $0 + (-5) + 13$.
11. Rewrite and simplify using commutative property: $(-2) + 11 + (-6)$.
12. True or false: $a + b = b + a$ still holds when $a = -8$ and $b = 3$. Show result.
13. Simplify: $14 + (-9) + (-5)$.
14. Use associative property to compute: $(-1) + 4 + (-3)$ by grouping $(4 + (-3))$ first.
15. Simplify: $(-20) + 12 + 8$ using grouping.
16. A diver is at -5 meters and goes down 7 meters, then up 4 meters. Write an expression and find the final depth.
17. Rewrite $9 + (-14) + 6$ using commutative property so positives are together, then simplify.
18. Simplify: $(-6) + (-3) + (-1)$.
19. Find a number x so that $(-4) + x + 9 = 10$.
20. Use the associative property to simplify: $(-2) + ((-3) + 7)$.
21. A bank account has $-\$12$ (overdraft). Then a deposit of $\$20$ and a withdrawal of $\$5$ occur. Write an expression and compute the final balance.
22. Rewrite and simplify: $(-7) + 2 + 15$ using commutativity.
23. Simplify: $11 + (-11) + (-5)$.
24. Are these expressions equivalent? Explain: $(-3) + 4 + (-2)$ and $4 + (-3) + (-2)$.
25. Simplify: $(-9) + 0 + 9$.
26. Use the commutative property to rewrite and simplify: $13 + (-8) + (-5)$.
27. Elevator problem: Elevator at floor 3 goes down 6 floors, then up 2 floors. Write an expression and find the final floor.
28. Simplify by grouping: $(-4) + (-16) + 20$.
29. Express subtraction as addition of a negative and simplify: $7 - 12 + 9$.
30. Simplify: $(-1) + (-1) + 2 + (-2)$.



Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Math Worksheet for 7th Grade

Properties of addition & subtraction

31. A hiker is at elevation 250 m, descends 300 m, then climbs 120 m. Write an expression and find final elevation.
32. Show that changing order doesn't change the sum: $(-5) + 7 + (-2)$ and $7 + (-2) + (-5)$. Compute both sums.
33. Simplify: $(-18) + 7 + 11$.
34. Find x so that $x + (-6) + 4 = -2$.
35. Rewrite using associative property to make calculation easy and simplify: $25 + (-10) + (-15)$.
36. Simplify: $(-3) + 3 + (-3) + 3$.
37. A player loses 4 points, then gains 9 points, then loses 7 points. Write expression and find final score change.
38. Simplify: $(-14) + (-1) + 6$.
39. Use commutative and associative properties to simplify: $(-2) + 5 + (-5) + 7$.
40. Find a number y so that $(-10) + y + (-2) = -5$.
41. Simplify and explain: $8 + (-3) + (-5)$ using grouping of negatives.
42. Rewrite as equivalent expression using negatives: $16 - 25 + 9$, then simplify.
43. Simplify: $(-7) + (-8) + 20$.
44. True or false: Addition with negatives is associative. Use an example to justify your answer.
45. Use commutativity to rewrite and then simplify: $(-11) + 6 + 5$.
46. Simplify: $(-30) + 10 + 15$ using grouping to make mental math easy.
47. A submarine is at -40 m, rises 18 m, then descends 25 m. Write expression and find final depth.
48. Rewrite $4 + (-9) + (-1)$ so negatives are together; then simplify.
49. Simplify: $(-2) + (-3) + 0 + 5$.
50. Find z so that $(-3) + (-z) + 7 = 1$. (Solve for z , where z is a positive number.)