

Simplify all answers and show your work!

1. Multiplying a positive number by negative number results in a _____ number.
2. Multiplying a negative number by negative number results in a _____ number.
3. Multiplication is a shortcut for _____.
4. Absolute value measures a number's distance from _____.

Simplify.

5. $-(-10)$

6. $|7|$

7. $-|-9|$

8. $-9 + (-10)$

9. $-5 + 8$

10. $-12 - 14$

11. $(7)(-2)$

12. $(-3)(-4)$

13. $\frac{-48}{-8}$

14. $\frac{36}{-9}$

15. $(-3)(2)(4)(-2)$

16. $7 - 12 + 8$

17. $-(-3) + (-5) - 7$

Write $<$ or $>$ to make a true statement: 18. -7 _____ -12

19. 4 _____ -6

20. -9 _____ 0

21. Evaluate $4x - y$, when $x = -3$ and $y = 7$.22. Evaluate $a \cdot x \cdot y$ when $a = -2$, $x = 3$, $y = -5$.

Translate into an algebraic expression:

23. Two more than 5 times a number

24. Eight less than a number.

25. Multiply: $3(2x + 1)$

26. Multiply: $6(x - 9)$

27. Factor: $10x - 5y + 20z$

28. Combine like terms: $4a - 5d + 3d - 7a$

29. Distribute (multiply): $-(3x + 4y - 9)$