



Math Worksheet for 7th Grade

Multiply with negatives

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

1. Calculate: $3 \times (-4)$
2. Calculate: $(-5) \times 6$
3. Calculate: $(-7) \times (-2)$
4. Calculate: $(-1) \times (-9)$
5. Calculate: $0 \times (-8)$
6. Calculate: $(-12) \times 1$
7. Calculate: $(-4) \times (-4)$
8. Calculate: $8 \times (-3)$
9. Calculate: $(-10) \times (-5)$
10. Calculate: $(-6) \times 0$
11. Word problem: A submarine dives 3 meters every minute (downwards is negative). What is the change in depth after 4 minutes? Represent it as a multiplication with negatives and give the result.
12. Word problem: Each day a temperature drops by 2 degC. What is the total change after -3 days (that is, 3 days in the opposite direction in time)? Explain using multiplication with negatives.
13. Explain with a number-line model why $(-2) \times 3 = -6$ and why $2 \times (-3) = -6$. Are these two expressions the same or different? Explain.
14. Fill the pattern and explain why the sign changes:
 $4 \times 3 = 12$
 $3 \times 3 = 9$
 $2 \times 3 = 6$
 $1 \times 3 = 3$
 $0 \times 3 = 0$
 $(-1) \times 3 = ?$
 $(-2) \times 3 = ?$
15. Use pattern reasoning to complete and explain:
 $3 \times (-2) = -6$
 $2 \times (-2) = -4$
 $1 \times (-2) = -2$
 $0 \times (-2) = 0$
 $(-1) \times (-2) = ?$
 $(-2) \times (-2) = ?$
16. Use the distributive property to show why $(-3) \times (-2) = 6$. Write a short explanation.



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17. Explain why the product of two negative numbers should be positive by thinking about "the opposite of an opposite." Give a simple sentence example.
18. Calculate: $(-3) \times 5 \times (-2)$ (multiply left to right; include sign reasoning)
19. Calculate: $(-2) \times (-3) \times (-4)$ (find the final sign and value)
20. Word problem: You owe \$7 (a debt of -\$7) to each of 4 friends. If you reverse the situation and your friends owe you (the opposite) \$7 each, what is the total change in your money? Model with multiplication using negatives and give the answer.
21. Calculate: $(-9) \times (-1)$
22. Calculate: $(-15) \times (-2)$
23. Explain: Using 0 as a bridge, show why $(-a) \times (-b)$ is positive for positive a and b . (Give a short step-by-step idea, a and b can be numbers.)
24. Word problem: Facing east is positive, west is negative. A person walks 5 meters to the west each minute for 3 minutes. What is the displacement? Represent as multiplication.
25. Word problem: A temperature change of -4 degC happens per day. If someone considers "undoing" this change for 3 days (taking the opposite action each day), what is the result? Model with negatives and explain why the final result is positive or negative.
26. Calculate: $(-4) \times 7$
27. Calculate: $6 \times (-6)$
28. Calculate: $(-11) \times (-3)$
29. Word problem: A bank subtracts \$10 from your account every hour as a fee ($-\$10$ per hour). If you reverse the action for 2 hours (stop the fee and bank gives you back the amount, i.e., take the opposite), what is the total effect? Model with negatives.
30. Explain using multiplication rules and an example why the sign of a product depends on the number of negative factors (even vs odd).
31. Calculate: $(-2) \times 0 \times (-5)$
32. Calculate: $(-1) \times 12$
33. Calculate: $(-3) \times (-10)$
34. Word problem: A hill rises 8 meters for each step forward ($+8$ per step). If you move backward (opposite direction) for -2 steps (i.e., take the opposite of moving forward twice), what is the total change? Explain how this models multiplying negatives.
35. Explain: Use the idea of repeated addition to clarify why $(-3) \times 4 = -12$ but why $3 \times (-4) = -12$ also. What does each expression mean in words?
36. Calculate: $(-20) \times (-1)$
37. Calculate: $(-5) \times (-6)$
38. Word problem: A robot moves left 3 units every second. Left is negative. If the robot reverses direction (takes the opposite) for 4 seconds, what is the movement? Model as negative \times negative.



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39. Calculate: $(-14) \times 2$

40. Calculate: $2 \times (-14)$

41. Explain: Using the distributive property on $0 = a + (-a)$, show algebraically why $(-a) \times (-b) = ab$ for positive a, b . Keep explanation short.

42. Word problem: On a number line, each "operation" of "take the opposite" multiplies by -1 . Starting at $+5$, apply "take the opposite" 3 times and express this as multiplication. What is the final number? Now apply it 4 times—what is the result? Explain pattern.

43. Calculate: $(-3) \times (-3)$

44. Calculate: $(-16) \times (-2)$

45. Word problem: A store has a markdown of \$6 each item (a negative change). If the markdown is removed (opposite of markdown) for 5 items, model that with multiplication and find the total change in price.

46. Explain: If you think of multiplication as scaling, explain why multiplying by -1 gives the opposite, and multiplying twice by -1 gives the original positive. Use a concrete number example.

47. Calculate: $(-25) \times 0$

48. Calculate: $(-2) \times (-25)$

49. Word problem: A diver goes down 2 meters per minute (down is negative). If we think of "going back in time" -3 minutes, what is the resulting displacement? Explain why the result is positive or negative.

50. Concept check: Give two different explanations (one using pattern/repeated subtraction, and one using distributive property or algebra) that show why a negative times a negative is a positive.