

Answer Key

Checking Multiplication Using Even & Odd Patterns

1. Even	42 ends in 2, so it is even
2. Odd	37 ends in 7, so it is odd
3. Odd	15 ends in 5, so it is odd
4. A	37 is odd because it ends in 7
5. B	100 is even because it ends in 0
6. B	81 is odd because it ends in 1
7. Odd	7 is odd, 3 is odd. $\text{Odd} \times \text{Odd} = \text{Odd}$
8. Odd	5 is odd, 5 is odd. $\text{Odd} \times \text{Odd} = \text{Odd}$
9. Even	4 is even, 5 is odd. $\text{Even} \times \text{Odd} = \text{Even}$
10. Even	8 is even, 6 is even. $\text{Even} \times \text{Even} = \text{Even}$
11. C	3 is odd, 3 is odd. $\text{Odd} \times \text{Odd} = \text{Odd}$
12. D	5 is odd, 9 is odd. $\text{Odd} \times \text{Odd} = \text{Odd}$
13. C	6 is even, 7 is odd. $\text{Even} \times \text{Odd} = \text{Even}$
14. Yes, possible. 8 is even, 9 is odd. $\text{Even} \times \text{Odd} = \text{Even}$, and 72 is even. ✓	$8 \text{ (even)} \times 9 \text{ (odd)}$ should be even. 72 is even. This matches!
15. Yes, possible. 4 is even, 6 is even. $\text{Even} \times \text{Even} = \text{Even}$, and 24 is even. ✓	$4 \text{ (even)} \times 6 \text{ (even)}$ should be even. 24 is even. This matches!
16. No, impossible. 6 is even, 7 is odd. $\text{Even} \times \text{Odd}$ must be Even, but 43 is odd. ✗	$6 \text{ (even)} \times 7 \text{ (odd)}$ should be even. 43 is odd. This is wrong!
17. No, impossible. 5 is odd, 9 is odd. $\text{Odd} \times \text{Odd}$ must be Odd, but 44 is even. ✗	$5 \text{ (odd)} \times 9 \text{ (odd)}$ should be odd. 44 is even. This is wrong!
18. B	$4 \text{ (even)} \times 7 \text{ (odd)}$ must be even. Only 28 is even. The others are odd.
19. A	$5 \text{ (odd)} \times 9 \text{ (odd)}$ must be odd. Only 45 is odd. The others are even.
20. B	$6 \text{ (even)} \times 8 \text{ (even)}$ must be even. Only 48 is even. The others are odd.
21. A	A is wrong because 9×9 should be odd, but 80 is even
22. A	A is wrong because 7×3 should be odd, but 20 is even
23. A	A is wrong because 8×3 should be even, but 25 is odd