

## Answer Key

### Even & Odd Patterns with LARGE Numbers

|                    |                                                                                    |
|--------------------|------------------------------------------------------------------------------------|
| 1. Odd             | Last digit is 3, so 12,483 is Odd                                                  |
| 2. Odd             | Last digit is 7, so 1,847 is Odd                                                   |
| 3. Even            | Last digit is 6, so 5,926 is Even                                                  |
| 4. Even            | Last digit is 0, so 8,750 is Even                                                  |
| 5. Odd             | Last digit is 1, so 23,491 is Odd                                                  |
| 6. A               | 1,642 is even, 3,891 is odd. Even $\times$ Odd = Even                              |
| 7. A               | 348 is even, 527 is odd. Even $\times$ Odd = Even                                  |
| 8. B               | 9,263 is odd, 7,185 is odd. Odd $\times$ Odd = Odd                                 |
| 9. B               | 825 is odd, 493 is odd. Odd $\times$ Odd = Odd                                     |
| 10. A              | 5,777 is odd, 8,444 is even. Odd $\times$ Even = Even                              |
| 11. Yes, possible  | 246 (even) $\times$ 357 (odd) = even. Answer 87,842 is even. $\checkmark$          |
| 12. Yes, possible  | 1,428 (even) $\times$ 2,650 (even) = even. Answer 3,784,200 is even. $\checkmark$  |
| 13. No, impossible | 9,999 (odd) $\times$ 7,777 (odd) must be odd. Answer 77,762,226 is even. $\times$  |
| 14. Yes, possible  | 835 (odd) $\times$ 729 (odd) = odd. Answer 608,715 is odd. $\checkmark$            |
| 15. No, impossible | 5,318 (even) $\times$ 4,927 (odd) must be even. Answer 26,202,087 is odd. $\times$ |
| 16. No, impossible | 6,245 (odd) $\times$ 3,817 (odd) must be odd. Answer 23,836,564 is even. $\times$  |
| 17. No, impossible | 847 (odd) $\times$ 926 (even) must be even. Answer 784,321 is odd. $\times$        |
| 18. B              | 576 (even) $\times$ 834 (even) must be Even                                        |
| 19. C              | 8,624 (even) $\times$ 5,931 (odd) must be Even                                     |
| 20. C              | 1,247 (odd) $\times$ 3,851 (odd) must be Odd                                       |