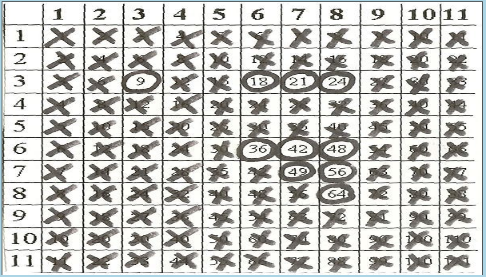
Remember: **Multiplication is just a quick way of adding**

1. 3 x 5 really means 3 + 3 + 3 + 3 +3
2. Add: 3 + 3 + 3 + 3 + 3 you get 15
3. So: 3 x 5 also equals 15

**Helpful Rules:**

|  |  |
| --- | --- |
| **Rule / Description** | **Example** |
| You Times Me is the Same as Me Times You   * known as the reflexive property of multiplication, just means that A x B = B x A | 6 x 7 = **42**  7 x 6 = **42** |
| 0's: Anything times 0 equals 0 | 0 x 2 = 0 |
| 1’s: Any number times 1 is that number | 1 x 6 = **6**  1 x 4 = **4** |
| 2’s: Multiply by 2, Double the number | 2 x 5 = **10**  2 x 10 = **20** |
| 4’s: Multiplying by 4 is doubling twice | 4 x 3  3 + 3 = 6, 6 +6 = **12** |
| 5's: Use what you know about skip counting by 5 | 5 x 3 = 15  (5, 10, 15) |
| 6’s: Multiply 6 by an even number, they both end in the same digit | 6 x 2 = **12**  6 x 4 = **24** |
| 9's: 10 times the number then minus the number | 9 x 4 = **36**  10 x 4 = 40 – 4 = **36** |
| 10's: Add a zero to any number that you multiply by 10. | 6 x 10 = **60** |
| 11's: just repeat the digit | 4 x 11 = **44** |

**Only 10 Problems Are Left to Memorize**

**Other Tricks & Rhymes**

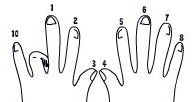
5,6,7,8 🡪 56 = 7 x 8

7 x 8 is full of tricks, 7 x 8 is 56

7 x 7: 7 and 7 are doing fine, 7 time 7 is 49

8 time 8 fell on the floor, picked it up was 64 3 x 7 is lots of fun, 3 x 7 is 21

9’s: Fingers numbered 1 through 10, fold down number multiplied by and you have your answer

2 x 9 = 18

11’s: for 10x11 to 18x11: write the sum of the digits between the digits

15 x 11: 1 ***(1+5)***5 = **165** 13 x 11: 1 **(1+3)** 3 = **143**

In your groups come up with a rhyme or trick for the other multiplication facts:

3x3:

3x6:

3x8:

6x6:

6x7:

6x8: