

**Multiplication Table – 25 x 25**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** | **25** |
| **1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **12** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **13** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **14** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **15** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **16** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **17** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **18** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **19** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **20** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **21** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **22** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **23** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **24** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **25** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Harold’s Times Tables**

**“Cheat Sheet”**

10 April 2020

|  |  |  |  |
| --- | --- | --- | --- |
| **For: Digit** · **n** | **Fill-In Tips** | **How to Spot** | **Prime Factoring Tips** |
| **Digit** |  |  |  |
| **1** | Copy n | Same as n | See *prime* numbers (2,3,5,7,11,13,17,19,23, …) |
| **2** | Double n | If the last digit is even $\left\{0, 2, 4, 6, 8\right\}$  | Cut in half. Keep if the result is an integer.Factors: $\left\{2, …, m\right\}$ |
| **3** | Triple n | See 9’s Rule below | Divide by ‘3’. Keep if the result is an integer.Factors: $\left\{3, …, m\right\}$ |
| **4** | Double n twice | If the last digit is even, then candidate | Cut in half twice. Keep if the result is an integer.Factors: $\left\{4, …, m\right\}\rightarrow \left\{2, 2, …, m\right\}$ |
| **5** | Add a trailing ‘0’ to n, then cut in half | If the last digit is a ‘0’ or ‘5’ | See 10’s Rule below if trailing ‘0’.Divide by ‘5’ if trailing ‘5’.Factors: $\left\{5, …, m\right\}$ |
| **6** | Triple n, then Double | 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, … | Cut in half, then divide by ‘3’. Keep if the result is an integer.Factors: $\left\{6, …, m\right\}\rightarrow \left\{2, 3, …, m\right\}$ |
| **7** | Memorize | Hardest | Divide by ‘7’ after trying all other factoring tips.Factors: $\left\{7, …, m\right\}$ |
| **8** | Double n 3 times | If the last digit is even, then candidate | Cut in half three times. Keep if the result is an integer.Factors: $\left\{8, …, m\right\}\rightarrow \left\{2, 2, 2, …, m\right\}$ |
| **9** | If n ≤ 10, then\_(n-1)\_\_(9-(n-1))\_ | Digits add up to ‘9’ or multiples of ‘9’ (9m) | Add up all digits, then divide by ‘9’. If the result is an integer, then ‘9’ is a factor.Factors: $\left\{9, …, m\right\}\rightarrow \left\{3, 3, …, m\right\}$ |
| **10** | Add a trailing ‘0’ to n | If the last digit is a ‘0’ | Drop trailing zero to get the factors $\left\{2, 5\right\}$.Factors: $\left\{10, …, m\right\}\rightarrow \left\{2, 5, …, m\right\}$ |
| **11** | If n ≤ 9, then\_n\_n\_ | You see double digits | Divide by ‘11’. Keep if the result is an integer.Factors: $\left\{11, …, m\right\}$ |
| **12** | 12 · 12 = 144 | Is even and large | Cut in half twice, then divide by ‘3’. Keep if the result is an integer.Factors: $\left\{12, …, m\right\}\rightarrow \left\{2, 2, 3, …, m\right\}$ |