**Easy FAST Sub-Netting -**
just remember to draw this table **before** you start the exam…..

Start by listing the 'magic numbers / guzupbys' (how many addresses in each subnet) and their corresponding network masks on the side of your laminated note pad

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | address | = | /32 | = mask | 255.255.255.**255** | |
| ***2*** | ***addresses*** | ***=*** | ***/31*** | ***= mask*** | ***255.255.255.254*** | ***IGNORE FOR CCNA*** |
| 4 | addresses | = | /30 | = | 255.255.255.**252** | |
| 8 | | = | /29 | = | 255.255.255.**248** | |
| 16 | | = | /28 | = | 255.255.255.**240** | |
| 32 | | = | /27 | = | 255.255.255.**224** | |
| 64 | | = | /26 | = | 255.255.255.**192** | |
| 128 | | = | /25 | = | 255.255.255.**128** | |
| *256* | | *=* | */24* | *=* | *255.255.255.**0*** | |

Then, during the exam, at a glace you can see address space increments and how they correspond to the network mask in decimal and slash notation. **REMEMBER to take one address off for the network & one off for the broadcast to see 'usable address count' in all networks >31 bits**

Continue into the third octet ;

| | | | | | |
|---|---|---|---|---|---|
| 512 | = | /23 | = | 255.255.**254**.0 | third octet going up in 2 |
| 1024 | = | /22 | = | 255.255.**252**.0 | third octet going up in 4 |
| 2048 | = | /21 | = | 255.255.**248**.0 | third octet going up in 8 |
| 4096 | = | /20 | = | 255.255.**240.**0 | third octet going up in 16 |
| 8192 | = | /19 | = | 255.255.**224**.0 | third octet going up in 32 |

**ALSO MAY SAVE TIME if you list the network increments ;**

| **4** | **8** | **16** | **32** | **64** | **128** |
|---|---|---|---|---|---|
| 8 | 16 | 32 | 64 | 128 | 256 |
| 12 | 24 | 48 | 96 | 192 | |
| 16 | 32 | 64 | 128 | 256 | |
| 20 | 40 | 80 | 160 | | |
| 24 | 48 | 96 | 192 | | |
| 28 | 64 | 112 | 224 | | |
| 32 | 72 | 128 | 256 | | |
| 36 | 80 | 144 | | | |
| 40 | 88 | 160 | | | |
| 44 | 96 | 176 | | | |
| 48 | 104 | 192 | | | |
| 52 | 112 | 208 | | | |
| 56 | 120 | 224 | | | |
| 60 | 128 | 240 | | | |
| 64 | 136 | 256 | | | |
| 68 | 144 | | | | |
| 72 | 152 | | | | |
| 76 | 160 | | | | |
| 80 | | | | | |

It may seem mad - but it does work in the un-real world of the exam. It enables you to speed up your address calculations during those precious exam minutes. There are many questions on network sizing and addressing – every second saved helps in the exam.