

NUMBER PATTERNS

Find out what whole number OR fraction is multiplied or divided to get the next number. Repeat the process to fill in the missing numbers. Write down the number pattern on the right blank lines.

Example:

$$8 \quad 12 \quad 18 \quad 27 \quad \frac{81}{2} \quad \frac{243}{4} \quad \frac{729}{8} \quad \times\left(\frac{3}{2}\right)$$

| | | | | | | | | | |
|-----|------------------|----------------|---------------|----------------|-----------------|-----------------|------------------|-------------------|----------------------------------|
| 1. | $\frac{1}{2}$ | $\frac{3}{2}$ | $\frac{9}{2}$ | $\frac{27}{2}$ | $\frac{81}{2}$ | $\frac{243}{2}$ | $\frac{729}{2}$ | $\frac{2187}{2}$ | $\times 3$ |
| 2. | 5 | 10 | 20 | 40 | 80 | 160 | 320 | 640 | $\times 2$ |
| 3. | $\frac{3125}{2}$ | 1250 | 1000 | 800 | 640 | 512 | $\frac{2048}{5}$ | $\frac{8192}{25}$ | $\times\left(\frac{4}{5}\right)$ |
| 4. | 1000 | 500 | 250 | 125 | $\frac{125}{2}$ | $\frac{125}{4}$ | $\frac{125}{8}$ | $\frac{125}{16}$ | $\div 2$ |
| 5. | $\frac{11}{3}$ | 11 | 33 | 99 | 297 | 891 | 2673 | 8019 | $\times 3$ |
| 6. | 7 | 14 | 28 | 56 | 112 | 224 | 448 | 896 | $\times 2$ |
| 7. | 8 | 12 | 18 | 27 | $\frac{81}{2}$ | $\frac{234}{4}$ | $\frac{702}{8}$ | $\frac{2106}{16}$ | $\times\left(\frac{3}{2}\right)$ |
| 8. | 4374 | 2916 | 1944 | 1296 | 864 | 576 | 384 | 256 | $\times\left(\frac{2}{3}\right)$ |
| 9. | $\frac{3}{2}$ | 3 | 6 | 12 | 24 | 48 | 96 | 192 | $\times 2$ |
| 10. | 7 | 14 | 28 | 56 | 112 | 224 | 448 | 896 | $\times 2$ |
| 11. | 81 | 27 | 9 | 3 | 1 | $\frac{1}{3}$ | $\frac{1}{9}$ | $\frac{1}{27}$ | $\div 3$ |
| 12. | 1024 | 256 | 64 | 16 | 4 | 1 | $\frac{1}{4}$ | $\frac{1}{16}$ | $\div 4$ |
| 13. | $\frac{1}{128}$ | $\frac{1}{16}$ | $\frac{1}{2}$ | 4 | 32 | 256 | 2048 | 16384 | $\times 8$ |
| 14. | 12500 | 2500 | 500 | 100 | 20 | 4 | $\frac{4}{5}$ | $\frac{4}{25}$ | $\div 5$ |
| 15. | $\frac{2}{81}$ | $\frac{2}{9}$ | 2 | 18 | 162 | 1458 | 13122 | 118098 | $\times 9$ |