

$$1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 = \underline{55}$$

$$11 + 12 + 13 + 14 + 15 + 16 + 17 + 18 + 19 + 20 = \underline{155}$$

$$21 + 22 + 23 + 24 + 25 + 26 + 27 + 28 + 29 + 30 = \underline{255}$$

$$31 + 32 + 33 + 34 + 35 + 36 + 37 + 38 + 39 + 40 = \underline{355}$$

$$41 + 42 + 43 + 44 + 45 + 46 + 47 + 48 + 49 + 50 = \underline{455}$$

$$51 + 52 + 53 + 54 + 55 + 56 + 57 + 58 + 59 + 60 = \underline{555}$$

$$61 + 62 + 63 + 64 + 65 + 66 + 67 + 68 + 69 + 70 = \underline{655}$$

$$71 + 72 + 73 + 74 + 75 + 76 + 77 + 78 + 79 + 80 = \underline{755}$$

$$81 + 82 + 83 + 84 + 85 + 86 + 87 + 88 + 89 + 90 = \underline{855}$$

$$91 + 92 + 93 + 94 + 95 + 96 + 97 + 98 + 99 + 100 = \underline{955}$$

$$55 + 155 + 255 + 355 + 455 + 555 + 655 + 755 + 855 + 955 = \underline{5050}$$

$$\sum_{i=1}^{100} i = 5050$$

Just to verify, $n=100$

$$\frac{n(n+1)}{2} = \frac{100(101)}{2} = \frac{10,100}{2} = 5,050$$