

Answer Key

The Number Devil challenges Robert to, “Pick a number, any number, and I can show it to be the sum of either two or three triangle numbers.” Take on the challenge yourself. Find two or three triangle numbers that add up to the following numbers:

$$10 = 1 + 3 + 6$$

$$46 = 10 + 36$$

$$13 = 3 + 10$$

$$50 = 1 + 21 + 28$$

$$25 = 10 + 15$$

$$51 = 15 + 36$$

$$30 = 3 + 6 + 21$$

$$70 = 6 + 28 + 36$$

$$32 = 1 + 10 + 21$$

$$83 = 28 + 55$$

$$36 = 15 + 21$$

$$95 = 1 + 3 + 91$$

$$42 = 6 + 36$$

$$103 = 3 + 45 + 55$$