Always, Sometimes or Never?

Always, Sometimes or Never? – Grid

Always True	Sometimes True	Never True
If you add a multiple of 10 to a multiple of 5 the answer is a multiple of 5 P: $5x + 10x = 5x + (5x)(2x)$	Multiples of 5 end in a 5 P: $25 = 5 \times 5$ 25 ends in five (this is an odd multiple of five) CP: $10 = 5 \times 2$ 10 doesn't end in five (this is an even multiple of five) ∴ odd multiples of five end in five	If you add two odd numbers you get an odd number CP: $(2x+1) + (2x+1) = 4x+2$ odd + odd = even F: If you add two numbers you get an even number
If you add 1 to an odd number you get an even number P: $(2x+1) + 1 = 2x+2$ odd + odd = even	The sum of three numbers is odd P: $3+3+3 = 9$ CP: $2+2+2 = 6$ ∴ the sum of three odd numbers is odd	

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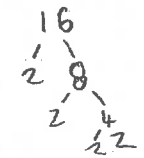
Always True	Sometimes True	Never True
The sum of three consecutive numbers is divisible by 3 P: $(x-1)+x+(x+1)=3x$	If you add a number to 5 your answer will be bigger than 5 P: $5+1=6$ CP: $5+0=5$ or $5+-1=4$ F: If you add a positive number to 5 it will be bigger than 5.	A square number has an even number of factors CP:  $2^4=5$ factors F: A Square number has an odd number of factors.
Dividing a whole number by a half makes it twice as big P: $x \div \frac{1}{2}=2x$	When you multiply two numbers you will always get a bigger number P: $2\times2=4$ CP: $-2\times2=-4$ F: Two positive integers Mutiplyed together makes a bigger numer.	