Multiplication Strategies

Strategy	Definition	Example	Solution	Answer
1) Zero Strategy	When multiplying factors that end in zero. Multiply the front numbers and add the zeros on the end.	20 x 15	2 x 15 = 30 then add zero on the end.	300
2) Double-Double Strategy	When multiplying numbers and one of the factors is a 4, you can use this strategy to double the other factor twice.	14 x 4	Double the 14, then double it again. (14 x 2) x 2=	56
3) Double-Double-Double-Double strategy	When multiplying numbers and one of the factors is an 8, you can use this strategy to double the other factor three times.	8 x 16	Double the 16, then double it, then double it again. [(16x2)x2]x2=	128
4) The over Strategy	When multiplying factors that are close but slightly smaller to a benchmark number, change one of the factors by going over it, then subtract the amount that you went over back off.	19 x 12	19 x 12 = (20x12)-(1x12) = 240 - 12	228

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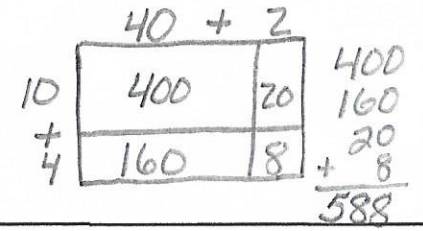
5) Partial Products or Area Model	When multiplying factors, create an area rectangle to use to break apart one or both factors into benchmark numbers. Then multiply each of the factors to find partial products, then add for total.	14 x 42		588
6) The Under Strategy	When multiplying factors that are close to but slightly larger than a benchmark number, change one of the factors by going under it, then add the amount that you went under back on.	21 x 14	21 x 14 = (20 x 14)+(1x14) = 280 + 14	294
7) The Double/Halve Strategy	When multiplying factors, you can double one factor and halve the other to make the problem simplier to solve.	15 x 16	15 x 16 = (15 x 2)x (16x2) = 30 x 8 = 60 x 4 = 120 x 2	240
8) 5 is Half of Ten Strategy	When multiplying factors and one of the factors is a 5 you can multiply by 10 then divide by 2 to find the product.	24 x 5	24 x 5 = (24 x 10) ÷ 2 = =240 ÷ 2 =	120