Basic Divide & Conquer Multiplication

Apply the basic divide & conquer multiplication algorithm. Fill in each blank with the appropriate value.

$a_L\ a_R$ $\quad$ $b_L\ b_R$

1203 * 4536

c_2 = (_____ * _____) firsts

c_{1A} = (_____ * _____) outers

c_{1B} = (_____ * _____) inners $\quad$ n = _____

c_0 = (_____ * _____) lasts

return _____ + _____ + _____ + _____ = _____

$c_2(10^n) + c_{1A}(10^{n/2}) + c_{1B}(10^{n/2}) + c_0$

$a_L\ a_R$ $\quad$ $b_L\ b_R$

_____ * _____

c_2 = (_____ * _____) firsts $\quad$ n = _____

c_{1A} = (_____ * _____) outers

c_{1B} = (_____ * _____) inners

c_0 = (_____ * _____) lasts

return _____ + _____ + _____ + _____ = _____

$c_2(10^n) + c_{1A}(10^{n/2}) + c_{1B}(10^{n/2}) + c_0$

$a_L\ a_R$ $b_L\ b_R$

_____ * _____

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return _____ + _____ + _____ + _____ = _____

$c_2(10^n) + c_{1A}(10^{n/2}) + c_{1B}(10^{n/2}) + c_0$

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$c_2(10^n) + c_{1A}(10^{n/2}) + c_{1B}(10^{n/2}) + c_0$