Checking Multiplication by Estimation

Do not use a calculator. By estimating the answer check these multiplications. In the decision column write either "Definitely wrong" or "Correct or near to correct". Discuss the answers in class.

Problem	Estimate of answer, or a reason the answer is wrong	Decision
46 x 89 = 4097	6 x 9 = 54, so units column is wrong	Definitely wrong
48 x 53 = 2544	$\approx$ 50 x 50 = 2500	Correct or near to correct
81 x 89 = 7209		
8 x 8978 = 83 024		
8888 x 42 = 17 776		
5.9342 x 12. 3 = 72.99066		
0.972 x 6309.8 = 5133.1256		
45.1 x 44.9 = 2024.99	40 x 40 = 1600, 50 x 50 = 2500. Answer $\approx$ 2000	Correct or near to correct
24.7 x 66.11 = 1432.917		
65.1 x 56 = 3645.6		
2 789 x 29 = 74 881		
35.01 x 6 503 = 22760.03		
888 x 923 = 819 624		
4.977 x 8.76 = 43.59852		
1.0567 x 456.9 = 452.0623		
$\frac{10}{21} \times \frac{10}{21} = \frac{100}{441}$	$\frac{10}{21} \times \frac{10}{22} \approx \frac{1}{2} \times \frac{1}{2} = \frac{1}{4} \approx \frac{100}{441}$	Correct or near to correct
$\frac{1}{11} \times 23.61 = 2.15$		