Name _____ Date _____

Multiplying by 9 Using Patterns

Unlike with other numbers, multiplying any *single-digit* number by 9 results in a recognizable pattern. For example:

2 x 9 = **18**	**1 + 8** = 9
3 x 9 = **27**	**2 + 7** = 9
4 x 9 = **36**	**3 + 6** = 9
5 x 9 = **45**	**4 + 5** = 9

You should notice that 2 x 9 = 18 and that adding together the two digits of the answer equals 9. In other words, 1 + 8 = 9.

Fill out the rest of the chart by writing the correct number on the blank spaces.

6 x 9 = **54**	**5 + 4** = 9
7 x 9 = **63**	___ + ___ = 9
8 x 9 = **72**	___ + ___ = 9
9 x 9 = **81**	___ + ___ = 9

Does this pattern work for 9 x 10? Yes or No?

Does it work for 9 x 11? Yes or No?