Quadratic solving sorter

Problem

Sort these quadratic equations into groups.

- How will you choose to define the groups?
- Are there some equations which belong to more than one group?

Once you have sorted the equations into groups, write a further equation for each group. (There are blank cards provided for this purpose.)

How else could you have sorted the equations?

(For a suggestion as to one possible way of grouping the equations, you could use the possible grouping cards.)

$3x^2 - 17 = 0$	$x^2 - 6x - 10 = 0$	$4x^2 - 7x = 0$
$3x^2 - 5x - 11 = 0$	$x^2 - 3x + 2 = 0$	$x^2 + 3x = 0$
$(2x - 5)^2 - 9 = 0$	$(2x - 1)(x + 3) = 0$	$(x - 3)^2 - 4 = 0$
$x^2 - 9 = 0$	$2x^2 + 5x + 2 = 0$	$2x^2 + 7x + 4 = 0$
$x^2 + 6x - 72 = 0$	$(x + 1)^2 = 0$	$x^2 - 16x = 0$
$2x^2 + 6x + 4 = 0$	$7x^2 + 14x - 21 = 0$	$3(x + 4)^2 - 8 = 0$