On 12.7 #53 you will get some big numbers while solving the equation. When you simplify both sides and set all terms equal to zero you should have:

$$29x^2 - 290x - 17400 = 0$$

Now factor out a 29:

$$29(x^2 - 10x - 600) = 0$$

You should be able to factor the trinomial using the following table:

Factors	Sum
ac = (1)(-600) = - 600	b = -10
-30, 20	-10