Solve the equation by completing the square.

2x2 + 8x - 1 = 6

+ 1 + 1

2x2 + 8x = 7

2 2 2

x2 + 4x + 4 = 3.5 + 4 4/2 = 22 = 4

Cannot square root a decimal… So we turn it into a fraction.

Multiply both numbers by 2…

So we get a perfect square.

The 30 will not simplify.

Subtract the 2 across.

Solve the equation by completing the square.

3x2 + 6x - 1 = 0

+1 +1

3x2 + 6x = 1

3 3 3

Leave 1/3 as a fraction

When you add the 1, keep the fraction

Multiply both numbers by 3…

To get a perfect square in the bottom

Simplify the 12.

Subtract the 1.