NAME:_____

1. Solve by completing the square: $-9x = 3x^2 - 1$

[A] $\frac{-9 + \sqrt{93}}{6}$ and $\frac{-9 - \sqrt{93}}{6}$

[B] $\frac{-9 + \sqrt{69}}{6}$ and $\frac{-9 - \sqrt{69}}{6}$

[C] $\frac{9 + \sqrt{93}}{6}$ and $\frac{9 - \sqrt{93}}{6}$

[D] $\frac{9 + \sqrt{69}}{6}$ and $\frac{9 - \sqrt{69}}{6}$

2. Solve by completing the square: $-9x = 3x^2 - 2$

[A] $\frac{9 + \sqrt{105}}{6}$ and $\frac{9 - \sqrt{105}}{6}$

[B] $\frac{-9 + \sqrt{105}}{6}$ and $\frac{-9 - \sqrt{105}}{6}$

[C] $\frac{9 + \sqrt{57}}{6}$ and $\frac{9 - \sqrt{57}}{6}$

[D] $\frac{-9 + \sqrt{57}}{6}$ and $\frac{-9 - \sqrt{57}}{6}$

3. Solve by completing the square: $8x = 5x^2 - 1$

[A] $\frac{-4 + \sqrt{21}}{5}$ and $\frac{-4 - \sqrt{21}}{5}$

[B] $\frac{-4 + \sqrt{11}}{5}$ and $\frac{-4 - \sqrt{11}}{5}$

[C] $\frac{4 + \sqrt{21}}{5}$ and $\frac{4 - \sqrt{21}}{5}$

[D] $\frac{4 + \sqrt{11}}{5}$ and $\frac{4 - \sqrt{11}}{5}$

4. Solve by completing the square: $10x = 4x^2 - 2$

[A] $\frac{-5 + \sqrt{17}}{4}$ and $\frac{-5 - \sqrt{17}}{4}$

[B] $\frac{5 + \sqrt{17}}{4}$ and $\frac{5 - \sqrt{17}}{4}$

[C] $\frac{5 + \sqrt{33}}{4}$ and $\frac{5 - \sqrt{33}}{4}$

[D] $\frac{-5 + \sqrt{33}}{4}$ and $\frac{-5 - \sqrt{33}}{4}$

5. Solve by completing the square: $-6x = 3x^2 - 1$

[A] $\frac{-3 + \sqrt{6}}{3}$ and $\frac{-3 - \sqrt{6}}{3}$

[B] $\frac{-3 + 2\sqrt{3}}{3}$ and $\frac{-3 - 2\sqrt{3}}{3}$

[C] $\frac{3 + \sqrt{6}}{3}$ and $\frac{3 - \sqrt{6}}{3}$

[D] $\frac{3 + 2\sqrt{3}}{3}$ and $\frac{3 - 2\sqrt{3}}{3}$

[1] A

[2] B

[3] C

[4] C

[5] B