Find the axis of symmetry of the parabola formed by the following quadratic function: $y = 2x^2 + 3x - 10$

Solution:

$$y = 2x^2 + 3x - 10 = 2\left(x^2 + \frac{3}{2}x + \frac{9}{16}\right) - \frac{9}{8} - 10 = 2\left(x + \frac{3}{4}\right)^2 - 11\frac{1}{8}$$

$$y = 2\left(x + \frac{3}{4}\right)^2 - 11\frac{1}{8}$$

The vertex of parabola $\left(-\frac{3}{4}, -11\frac{1}{8}\right)$

The axis of symmetry of the parabola is $x = -\frac{3}{4}$

Answer: $x = -\frac{3}{4}$