

Problem 1 Complete the square on the following quadratic:

$$4x^2 - 80x + 396 = \boxed{4}(\boxed{x - 10})^2 + \boxed{-4}$$

Feedback(attempt): Don't forget to factor out any leading term, like the 4 (ignore if this is 1, since this is randomly generated). Once you have factored out the leading term (if needed), you need to divide the resulting middle term $(-\frac{5}{2})$ and then square it to get $\frac{25}{4}$, which you need to add and subtract to the expression.

Problem 2 Complete the square on the following quadratic:

$$-5x^2 - 30x - 41 = \boxed{-5}(\boxed{x + 3})^2 + \boxed{4}$$

Feedback(attempt): Don't forget to factor out any leading term, like the -5 (ignore if this is 1, since this is randomly generated). Once you have factored out the leading term (if needed), you need to divide the resulting middle term $(-\frac{3}{5})$ and then square it to get $\frac{9}{25}$, which you need to add and subtract to the expression.

Problem 3 Complete the square on the following quadratic:

$$-x^2 + 14x - 41 = \boxed{-1}(\boxed{x - 7})^2 + \boxed{8}$$

Feedback(attempt): Don't forget to factor out any leading term, like the -1 (ignore if this is 1, since this is randomly generated). Once you have factored out the leading term (if needed), you need to divide the resulting middle term (7) and then square it to get 49, which you need to add and subtract to the expression.

Problem 4 Complete the square on the following quadratic:

$$-2x^2 - 20x - 46 = \boxed{-2}(\boxed{x + 5})^2 + \boxed{4}$$

Factor Coefficients Method Practice 1

Feedback(attempt): Don't forget to factor out any leading term, like the -2 (ignore if this is 1, since this is randomly generated). Once you have factored out the leading term (if needed), you need to divide the resulting middle term ($-\frac{5}{2}$) and then square it to get $\frac{25}{4}$, which you need to add and subtract to the expression.
