5.3 Adding Polynomials

Symbolically
Add $\left(3 c^{2}+5 c-6\right)+\left(2 c^{2}-3 c+4\right)$

$$
\begin{gathered}
3 c^{2}+5 c-6+2 c^{2}-3 c+4 \\
3 c^{2}+2 c^{2}+5 c-3 c-6+4 \\
5 c^{2}+2 c-2
\end{gathered}
$$

2 group like terms
3. add coefficients of like terms

Vertically
Add $(2 m+9)+\left(3 m^{2}+m-14\right)$

* remove the brackets, and align
like terms vertically
like terms vertically

$$
\begin{array}{r}
: 2 m+9 \\
+3 m^{2}+1 m-14 \\
\hline 3 m^{2}+3 m-5
\end{array}
$$

Algebra Tiles
Add

$$
3 s^{2}+2 s-6+\left(-s^{2}-2 s+1\right)
$$



* combine / group matching
tiles
* remove zero pairs
the remaining tiles are


$$
\begin{array}{r}
\operatorname{pg} 228 \# 3-6 \\
8-10,12
\end{array}
$$

