

Expanding on Expanding

Find each product.

$$1) (5k - 3)(7k + 2)$$

$$= 35k^2 + 10k - 21k - 6$$

$$= 35k^2 - 11k - 6$$

$$2) (4r - 7)(8r^2 + 2r - 5)$$

$$= 32r^3 + 8r^2 - 20r$$

$$+ \quad - 56r^2 - 14r + 35$$

$$= 32r^3 - 48r^2 - 34r + 35$$

$$3) (7r^2 + 2r - 1)(5r^2 + r - 3)$$

$$= 35r^4 + 7r^3 - 21r^2$$

$$+ 10r^3 + 2r^2 - 6r$$

$$+ \quad - 5r^2 - r + 3$$

$$= 35r^4 + 17r^3 - 24r^2 - 7r + 3$$