Polynomials Card Sort

$f(x) = 2x^3 - x^2 - 7x + 6$	$2x^3 + ax^2 + bx + 6$ $(x-1)$ is a factor and the remainder on dividing by $(x+1)$ is 10.
$(1,0)$, $(3,30)$,$(5,196)$	Roots -2, 1, $\frac{3}{2}$
$y-$ intercept $= (0,6)$	$(2x-3)(x+2)(x-1)$
$f(x) = 2x^3 + 9x^2 + 13x + 6$	All negative roots
$y-$intercept $=$	$\frac{2x^4 + 5x^3 - 5x^2 - 20x - 12}{x-2}$
$(x+1)$ is a factor	$ax^3 + bx^2 + cx + 6$ Remainder on division by $(x-2)$, $(x-1)$, $(2x-1)$ are 84, 30 and 15 resp.

$(x+2)(2x^2+5x+3)$	$\dfrac{2x^4+3x^3-9x^2-8x+12}{x+2}$
$(2x^2+x-6)(x-1)$	$(2x^3+6x^2-8)-(7x^2+7x-14)$
$\sum \alpha = \dfrac{1}{2}$ $\sum \alpha\beta = -\dfrac{7}{2}$ $\sum \alpha\beta\gamma = -3$	$\sum \alpha = -\dfrac{9}{2}$ $\sum \alpha\beta = \dfrac{13}{2}$ $\sum \alpha\beta\gamma = -3$
Let α, β and γ be the roots of $8x^3-2x^2-7x+3$. Find the polynomial with roots $2\alpha, 2\beta, 2\gamma$	$\alpha^2+\beta^2+\gamma^2 = \dfrac{29}{4}$
$\sum \alpha^2\beta = -\dfrac{81}{4}$	Let α, β and γ be the roots of $2x^3+3x^2+x$. Find the polynomial with roots $\alpha-1$, $\beta-1$ and $\gamma-1$
$f(x) = x^2+4x+4$	$\alpha+\beta=-4$ $\alpha\beta=3$

Let α and β be the roots of $x^2 + 8x + 12$. Find the polynomial with roots $\frac{\alpha}{2}$ and $\frac{\beta}{2}$.	$f(4) = 35$
$2x^2 + 10x + 6$	$\alpha + \beta = -5$ $\alpha\beta = 3$
$\alpha^3 + \beta^3 = -80$	$\frac{1}{\alpha} + \frac{1}{\beta} = -\frac{5}{3}$
$f(x) = 2x^2 - 3x - 20$	$(2x + 5)(x - 4)$
Roots $x = 4$ and $x = -\frac{5}{2}$	$\alpha + \beta = \frac{3}{2}$ $\alpha\beta = -10$
$\alpha^2 + \beta^2 = \frac{89}{4}$	Let p and q be the roots of $18x^2 - 9x - 20 = 0$. Find the quadratic with roots $3p$ and $3q$.