

	Final exam practice sheet #3	Answers
1	Evaluate $x^3y^2 - xy + 10$ where $x = -2, y = 3$	-56
2	$\left(\frac{x^4y^7}{2y^4z^0}\right)^{-3}$	$\frac{8}{x^{12}y^9}$
3	$(2x^3 + 3x - 5) + (x^3 - 5x - 7) - (-4x^2 - 2x + 4)$	$3x^3 + 4x^2 - 16$
4	$(2x + 3)(x^2 - 3x - 4)$	$2x^3 - 3x^2 - 17x - 12$
5	Find the remainder when $x^3 - 2x^2 + 10$ is divided by $x + 2$	-6
6	Factor: $36x^5y^7z - 18x^7y^3$	$18x^5y^3(2y^4z - x^2)$
7	Factor: $16x^6 - 25y^{10}$	$(4x^3 + 5y^5)(4x^3 - 5y^5)$
8	Factor: $3x^2 + 7x - 6$	$(3x - 2)(x + 3)$
9	Factor: $5x^3 + 15x^2 - 2x - 6$	$(x + 3)(5x^2 - 2)$
10	Factor: $27x^3 + 8$	$(3x + 2)(9x^2 - 6x + 4)$