

Math 9		Review for exam #1	
Signed nos, integer exponents, polynomials, factoring (revSignNos, Ch 2, Ch 3A, Ch 3B)			
1	$-20 - 40 =$	2	$30 - (-70) =$
3	$-80 + 30 =$	4	$-3 + 5 - 7 - 2 + 4$
5	$(-3)(2)(-5)(-2)(4) =$	6	$5 - 3(5 - 8) =$
7	$5 - 3(4 - 6)^2 =$	8	$-3^4 =$
9	Evaluate : $2x - 3y(y - x)$ for $x = 4$ and $y = -2$	10	$\frac{5x^3y^8}{15x^{10}y^5}$
11	$(2x^4)^{-3}(4x^5) =$	12	$\frac{-5x^{-3}}{2x^5} =$
13	$\left(\frac{-2x^3}{3y^5}\right)^{-3} =$	14	$\frac{(2x^{-4})^{-3}}{4x^5}$
15	$\frac{x^{10}}{(2x^{-5})^{-4}} =$	16	$\frac{4x^{-7}}{-2x^{-5}} =$
17	Evaluate the expression $3x^2 - 4x + 5$ ; $x = -2$	18	$(4x^3y^2 - 3x^2y^3) - (7x^2y^3 + x^3y^2)$ $=$
19	$-3x^4y^7(2x^5y - 4xy^6) =$	20	$(3x - 2)(2x^2 - 5x + 7) =$
21	$(2x + 5)^2 =$	22	$(3x^2 - 5x + 7) \div (x - 2)$
23	$(x^3 - 27) \div (x - 3) =$	24	$(7x - 4)(3x + 5) =$
25	Factor: $12x^5y^7z - 18x^3y^8$	26	Factor: $3x^2 + 2x - 8$
27	Factor: $x^3 - 4x$	28	Factor: $3x^3y - 27xy$
29	Factor: $25x^6 - 49y^{100}$	30	Factor: $6x^2 + 23x - 4$
31	Factor: $10x^6 - 40$	32	Factor: $x^3 + 27$
33	Factor: $3x^2 - 17x + 20$	34	Factor: $x^2 - 10x + 21$
35	Factor: $2x^3 - 10x^2 + 12x$	36	Factor: $10x^2 + 23x + 12$
37	Factor: $x^3 + 7x^2 + 5x + 35$	38	Factor: $x^3 - 2x^2 - 3x + 6 =$
39	Factor: $64x^6 - 27$		

Answers					
1	-60	2	100	3	-50
4	-3	5	-240	6	14
7	-7	8	-81	9	-28
10	$\frac{y^3}{3x^7}$	11	$\frac{1}{2x^7}$	12	$\frac{-5}{2x^8}$
13	$\frac{27y^{15}}{-8x^9}$	14	$\frac{x^7}{32}$	15	$\frac{16}{x^{10}}$
16	$-\frac{2}{x^2}$	17	25	18	$3x^3y^2 - 10x^2y^3$
19	$-6x^9y^8 + 12x^5y^{13}$	20	$6x^3 - 19x^2 + 31x - 14$	21	$4x^2 + 20x + 25$
22	$3x + 1$ R9	23	$x^2 + 3x + 9$	24	$21x^2 + 23x - 20$
25	$6x^3y^7(2x^2z - 3y)$	26	$(3x - 4)(x + 2)$	27	$x(x + 2)(x - 2)$
28	$3xy(x - 3)(x + 3)$	29	$(5x^3 - 7y^{50})(5x^3 + 7y^{50})$	30	$(6x - 1)(x + 4)$
31	$10(x^3 - 2)(x^3 + 2)$	32	$(x + 3)(x^2 - 3x + 9)$	33	$(x - 4)(3x - 5)$
34	$(x - 7)(x - 3)$	35	$2x(x - 3)(x - 2)$	36	$(5x + 4)(2x + 3)$
37	$(x^2 + 5)(x + 7)$	38	$(x^2 - 3)(x - 2)$	39	$(4x^2 - 3)(16x^4 + 12x^2 + 9)$