

	Math 9 Review for final – A
1	Evaluate: $x^2y - x^3y^2 - 3$; $x = -1, y = 2$
2	Simplify: A) $(x^2y^{-3})^{-4}$ B) $\left(\frac{3x^5}{2y^2}\right)^{-3}$
3	Subtract: $(10x^3 - 5x^2 - 10) - (5x^3 - 7x + 3)$
4	Multiply: $(2x - 3)(5x^2 - 4x - 2)$
5	Find the remainder: $(x^3 - 5x^2 + 2) \div (x - 1)$
6	Find the remainder: $(2x^3 - 3x + 1) \div (x - 2)$
7	Factor: $20x^3y - 45xy^3$
8	Factor: A) $3x^2 + 2x - 21$ B) $5x^2 - 14x + 8$
9	Factor: $20x^3 - 5x^2 - 12x + 3$
10	Factor: $64x^3 + 125$
11	Factor: $8y^3 - 27$

Answers:

1	3	2	A) $\frac{y^{12}}{y^8}$ B) $\frac{8y^6}{27x^{15}}$
3	$5x^3 - 5x^2 + 7x - 13$	4	$10x^3 - 23x^2 + 8x + 6$
5	-2	6	11
7	$5xy(2x + 3y)(2x - 3y)$	8	A) $(3x - 7)(x + 3)$ B) $(5x - 4)(x - 2)$
9	$(5x^2 - 3)(4x - 1)$	10	$(4x + 5)(16x^2 - 20x + 25)$
11	$(2y - 3)(4y^2 + 6x + 9)$		