

Math R3 Review for final Practice I

1	Factor completely: $18x^5y^7 - 12x^7y^3$
2	Factor completely: $7x^2 + 11x - 6$
3	Factor completely: $27x^3 - 8$
4	Factor completely: $2x^3 + x^2 - 10x - 5$
5	$\frac{x+1}{7} - \frac{5}{x-2} =$
6	$\frac{3x}{(x+3)(x-3)} - \frac{x}{(x-3)(x+1)} =$
7	$\frac{\sqrt{18x^7y^4}}{\sqrt{2x^3y^6}} =$
8	$3\sqrt{75} - 5\sqrt{48} =$
9	$\frac{4}{\sqrt{7}-2}$
10	$(64x^{12}y^9)^{2/3} =$

Answers:

1	$6x^5y^3(3x^4 - 2x^2)$
2	$(7x - 3)(x + 2)$
3	$(3x - 2)(9x^2 + 6x + 4)$
4	$(2x + 1)(x^2 - 5)$
5	$\frac{x^2 - x - 37}{7(x - 2)}$
6	$\frac{2x^2}{(x + 3)(x - 3)(x + 1)}$
7	$\frac{3x^2}{y}$
8	$-5\sqrt{3}$
9	$\frac{4\sqrt{7} + 8}{3}$
10	$16x^8y^6$