

Math R3 Review for final Practice J

1	Factor completely: $36x^5y^7 - 24x^7y^3$
2	Factor completely: $4x^2 + 5x - 6$
3	Factor completely: $27x^3 + 8$
4	Factor completely: $3x^3 + x^2 - 15x - 5$
5	$\frac{5}{x-3} - \frac{x}{7} =$
6	$\frac{2x}{(x+2)(x-2)} - \frac{x}{(x-2)(x+1)} =$
7	$\frac{\sqrt{50x^7y^4}}{\sqrt{2x^3y^6}} =$
8	$3\sqrt{27} - 5\sqrt{48} =$
9	$\frac{4}{\sqrt{5}-2}$
10	$(81x^{12}y^{40})^{3/4} =$

Answers:

1	$12x^5y^3(3y^4 - 2x^2)$
2	$(4x - 3)(x + 2)$
3	$(3x + 2)(9x^2 - 6x + 4)$
4	$(3x + 1)(x^2 - 5)$
5	$\frac{-x^2 + 3x + 35}{7(x - 3)}$
6	$\frac{x^2}{(x + 2)(x - 2)(x + 1)}$
7	$\frac{5x^2}{y}$
8	$-11\sqrt{3}$
9	$4\sqrt{5} + 8$
10	$27x^9y^{30}$