

Math 9 Review for final – B	
1	Divide, find the remainder: $(x^4 - 3x^2 + 2x - 1) \div (x + 2)$
2	Multiply: $\frac{5x^2+10x}{x^2+9x+14} \cdot \frac{x^2-49}{10x^2-70x}$
3	Subtract: $\frac{5}{x-7} - \frac{4}{7-x}$
4	Add: $\frac{2}{x^2+6x+5} + \frac{3}{x^2+5x}$
5	Simplify: $\frac{\frac{3}{5x} - \frac{7}{10x}}{4 - \frac{3}{2x}}$
6	Multiply: $\sqrt{8x^3y} \cdot \sqrt{2x^5y^3}$
7	Combine: $4\sqrt{20} + 2\sqrt{45}$
8	Simplify: $\sqrt[5]{x^{28}y^{12}z^{15}}$

9	Rationalize the denominator: $\frac{3+\sqrt{2}}{5-\sqrt{2}}$
10	Evaluate: $\left(\frac{16}{81}\right)^{-\frac{3}{4}}$

Answers:

1	-1	2	$\frac{1}{2}$
3	$\frac{9}{x-7}$	4	$\frac{5x+3}{x(x+5)(x+1)}$
5	$\frac{-1}{40x-15}$	6	$4x^4y^2$
7	$14\sqrt{5}$	8	$x^5y^2z^3\sqrt[5]{x^3y^2}$
9	$\frac{17+8\sqrt{2}}{23}$	10	$\frac{27}{8}$