

Math R3 Review for final – practice E

1 $\frac{9-x^2}{x^2-8x+15}$

2 Rationalize the denominator: $\frac{5}{\sqrt{10}}$

3 Rationalize the denominator: $\frac{\sqrt{3}-1}{\sqrt{3}+2}$

4 Divide: $(4x^2 - 2x + 5) \div (x - 2)$

5 Subtract: $\frac{7}{15} - \frac{5}{9} =$

6 Simplify: $\frac{\frac{7}{xy}}{\frac{3}{x} + \frac{5}{y}}$

7 $\frac{2}{x+3} - \frac{3}{x-5} =$

8 $\sqrt{8x^5y} \cdot \sqrt{18x^3y^5}$

9 $\left(\frac{3x^4}{2y^5}\right)^{-2}$

10 Add: $\frac{3}{6x} + \frac{5}{3x^2} + \frac{4}{3x^2} =$

Answers:

1	$-\frac{3+x}{x-5}$
2	$\frac{\sqrt{10}}{2}$
3	$-5 + 3\sqrt{3}$
4	$4x + 6 \text{ R17}$
5	$-\frac{4}{45}$
6	$\frac{3y + 5x}{-x - 19}$
7	$\frac{4}{(x+3)(x-5)}$
8	$12x^4y^3$
9	$\frac{4y^{10}}{9x^8}$
10	$\frac{3x + 18}{6x^2}$