

Math R3 Review for final – Practice C

1 Factor: $3x^3 - 24$

2 Simplify: $\frac{14x^5y^4 - 7x^7y^5}{7x^5y^3}$

3 Divide: $(5x^2 - 3x + 7) \div (x - 3)$

4 Divide: $\frac{25x^2 - 9}{5x^2 + 8x + 3} \div \frac{6 - 10x}{2x + 2}$

5 $\frac{5}{x+2} + \frac{3}{x^2-4} =$

6 $3x^3(3x^2y)^{-2} =$

7 Rationalize the denominator: $\frac{5}{\sqrt{3}-2}$

8 $\left(\frac{5}{4x}\right)^{-2} =$

9 $(16x^{12}y^8)^{3/4} =$

10 Evaluate $5[3 - (2 - 7)] + 5 \cdot 2 + 1$

Answers:

1	$3(x - 2)(x^2 + 2x + 4)$
2	$2y - x^2y^2$
3	$5x + 12 R 43$
4	-1
5	$\frac{5x - 7}{x^2 - 4}$
6	$\frac{1}{3xy^2}$
7	$-5\sqrt{3} - 10$
8	$\frac{16x^2}{25}$
9	$8x^9y^6$
10	51