

Exam 3 Review Problems

1. Factor:

(a) $3p^2 - 17p + 10$

(b) $4x^3y + 11x^2y - 3xy$

(c) $50x^2 - 2y^2$

(d) $a^3 + 27b^3$

2. Solve the equation:

(a) $x^2 - 6x + 8 = 0$

(b) $2x^2 + 5x = 3$

(c) $x^2 = 16x$

3. The product of two consecutive integers is 8 more than twice their sum. Find the integers.

4. For what values of x is the rational expression $\frac{3x-2}{x^2-7x+6}$ undefined?

5. Divide: $\frac{r^2-16}{6r+9} \div \frac{r-4}{2r+3}$

6. Add: $\frac{3}{2x^2} + \frac{4}{3x}$

7. Subtract: $\frac{4}{k^2-9} - \frac{k+3}{3k-9}$