Algebra 2 Final Exam

1 $200 \times 0.02 \times 5 = 20$

$200 + 20 = 220$ ✓

2 $\frac{y}{3x} + \frac{b}{yz^3} - \frac{c}{3y^2}$

$\frac{y^3z^3}{3xy^2z^3} + \frac{3bxy}{3xy^2z^3} - \frac{3cxz^3}{3xy^2z^3}$

$\frac{y^3z^3 + 3bxy - cxz^3}{3xy^2z^3}$ ✓

3 $R = \frac{k}{B}$

$4 = \frac{k}{1}$

$k = 4$

$2 = \frac{4}{B}$

$B = 2$ ✓

4 $\sqrt{x^2 + 5x - 14} = x + 2$

$x^2 + 5x - 14 = (x+2)^2$

$x^2 + 5x - 14 = x^2 + 4x + 4$

$x - 18 = 0$

$x = 18$ ✓

5 $2x + 3y - z = 17$ ·

$3x - y + 2z = 11$

$x - 3y + 3z = -4$ ·

$2x + 3y - z = 17$

$x - 3y + 3z = -4$ +

$3x + 2z = 13$

$3x - y + 2z = 11 \quad \times 3$

$9x - 3y + 6z = 33$

$x - 3y + 3z = -4 \quad -$

$8x + 6z = 38$