

MATH 6 HOMEWORK 20

March 15, 2026

Good Luck on Math Kangaroo!

1. Open parenthesis, simplify

a. $x^2(x + 4) - 4(x + 4) =$

b. $(x - \sqrt{5})(x + \sqrt{5}) =$

c. $(x^2 - 2x + 1)(x - 1) =$

d. $(2x + 3)(x + y) =$

2. Factorize as much as possible (i.e., write as a product):

a. $x^2(x + 4) - 4(x + 4) =$

b. $x^2 - 9 =$

c. $x^2 - 5 =$

d. $2x^2 + 3x + 2xy + 3y =$

3. Simplify:

a. $(-1)^{231} =$

b. $(-a)^{200} =$

c. $\frac{(-a)^{117}}{(a)^{117}} =$

d. $(-ax)^{200} =$