

## Quadratic Functions Review

### Operations with Polynomials 2

Simplify each expression below.

1.  $(8x^2 + x - 6) - (-x^2 + 2x + 3)$

2.  $(4m^2 - 3m + 10) + (m^2 + m - 2)$

3.  $(7t^2 + 2 - t) + (t^2 - 7 - 2t)$

4.  $(9j^2 + j + jk) + (-3j^2 - jk - 4j)$

5.  $-2u^2n(4u - 2n)$

6.  $-\frac{1}{4}m(8m^2 + m - 7)$

7.  $5w(-7w + 3) + 2w(-2w^2 + 19w + 2)$

8.  $4z^2(z - 7) - 5z(z^2 - 2z - 2) + 3z(4z - 2)$

9.  $(w - 6)(w - 9)$

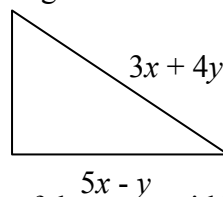
10.  $(6a - 3)(7a - 4)$

11.  $(t + 3)(t^2 + 4t + 7)$

12.  $(2x^2 - 2x - 3)(2x^2 - 4x + 3)$

Find the solution to each word problem below.

13. The measures of two sides of a triangle are given. If  $P$  is the perimeter, and  $P = 10x + 5y$ , find the measure of the third side.



14. Write an expression to represent the area of the trapezoid below.

