

**General Form**

Sheet 1

Write each quadratic function in general form.

1)  $f(x) = 3(x + 2)^2 + 5$

2)  $f(x) = 5\left(x - \frac{3}{4}\right)(7x + 1)$

3)  $f(x) = (x - 6)^2$

4)  $f(x) = 6(x + 7)^2 - 120$

5)  $f(x) = \left(2x - \frac{1}{6}\right)^2 + \frac{5}{12}$

6)  $f(x) = \frac{1}{3}(x - 4)^2 + 2$

7)  $f(x) = -(x - 5)^2 - 1$

8)  $f(x) = \frac{2}{5}(x - 1)(x + 9)$

9)  $f(x) = -2\left(x - \frac{1}{7}\right)(3x - 4)$

10)  $f(x) = -\frac{3}{2}(x + 3)^2 + 4$

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Write each quadratic function in general form.

1)  $f(x) = 3(x + 2)^2 + 5$

$$f(x) = 3x^2 + 12x + 17$$

2)  $f(x) = 5\left(x - \frac{3}{4}\right)(7x + 1)$

$$f(x) = 35x^2 - \frac{85}{4}x - \frac{15}{4}$$

3)  $f(x) = (x - 6)^2$

$$f(x) = x^2 - 12x + 36$$

4)  $f(x) = 6(x + 7)^2 - 120$

$$f(x) = 6x^2 + 84x + 174$$

5)  $f(x) = \left(2x - \frac{1}{6}\right)^2 + \frac{5}{12}$

$$f(x) = 4x^2 - \frac{2}{3}x + \frac{4}{9}$$

6)  $f(x) = \frac{1}{3}(x - 4)^2 + 2$

$$f(x) = \frac{1}{3}x^2 - \frac{8}{3}x + \frac{22}{3}$$

7)  $f(x) = -(x - 5)^2 - 1$

$$f(x) = -x^2 + 10x - 26$$

8)  $f(x) = \frac{2}{5}(x - 1)(x + 9)$

$$f(x) = \frac{2}{5}x^2 + \frac{16}{5}x - \frac{18}{5}$$

9)  $f(x) = -2\left(x - \frac{1}{7}\right)(3x - 4)$

$$f(x) = -6x^2 + \frac{62}{7}x - \frac{8}{7}$$

10)  $f(x) = -\frac{3}{2}(x + 3)^2 + 4$

$$f(x) = -\frac{3}{2}x^2 - 9x - \frac{19}{2}$$