$$f(x) = 2x^2 - 3x + 4$$

$$f(3) = 2(3)^2 - 3(3) + 4$$
$$= 18 - 9 + 4$$
$$= 13$$

$$f(-4) = 2(-4)^2 - 3(-4) + 4$$
$$= 32 + 12 + 4$$
$$= 48$$

$$f(x) = 2x^2 - 3x + 4$$

$$\boxed{f(a) = 2a^2 - 3a + 4}$$

$$f(3a) = 2(3a)^2 - 3(3a) + 4$$
$$= 2(9a^2) - 9a + 4$$
$$= 18a^2 - 9a + 4$$

$$3f(a) = 3(2a^2 - 3a + 4)$$
$$= 6a^2 - 9a + 12$$

$$f(x) = 2x^2 - 3x + 4$$

$$f(x+2) = 2\boxed{(x+2)^2} - 3(x+2) + 4$$
$$(x+2)(x+2)$$
$$= 2(x^2 + 4x + 4) - 3(x+2) + 4$$
$$= 2x^2 + 8x + 8 - 3x - 6 + 4$$
$$\boxed{f(x+2) = 2x^2 + 5x + 6}$$

p. 336-338

12-23, 28-32, 34-35, 49-50, 57-58