# 1

$$\sqrt{3 - 3} + 4 = 4$$

$$\sqrt{3 - -2} + 4 = \sqrt{5} + 4$$

$$\sqrt{3 - -a} + 4 = \sqrt{3 + a} + 4$$

$$-\sqrt{3 - a} + 9$$

$$\sqrt{3 - (a + h)} + 4$$

# 2

$$(y^2 + 4x) + (3 - x^2)$$
$$x^2 - x^2 + 4x + 3$$
$$4x + 3 \qquad D: (-\infty, \infty)$$

$$x^2 + 4x - (3 - x^2)$$
$$x^2 + x^2 + 4x - 3$$
$$2x^2 + 4x - 3 \qquad D: (-\infty, \infty)$$

$$(-x^2 + 3) x^2 + 4x / 3 - x^2$$
$$-1 (4x + 3 / -x^2 + 3)$$

$$x \qquad \sqrt{-x^2 + 3}$$
$$x \neq \pm\sqrt{3}$$

# 3

$$f(x) = x + 1$$
$$g(x) = 3x + 3$$
$$h(x) = x^2 + 2x + 1$$

$$f - g = (x + 1) - (3x + 3)$$
$$2x - 2$$

$$f + g \qquad (4x + 4)$$

$$f + g + h \qquad x^2 + 6x + 1 + 3 + 1$$
$$x^2 + 6x + 5$$

# 4 odd $f(x) = -f(-x)$

guessed cos x time
and 2 attempts

# 5 $1/x + 5x$

$$f(x) = f(-x)$$

$$1/x + 5x = -(-1/x - 5x)$$
$$1/x + 5x = 1/x + 5x$$

$$x < -\sqrt{3} \text{ or } -\sqrt{3} < x < \sqrt{3} \text{ or }$$
$$x > \sqrt{3}$$