5)

$$\frac{3}{x^2 + 4 + 4x} = \frac{2}{x^2 - 4}$$

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

$$\frac{3(x-2)}{(x+2)^2(x-2)} = \frac{2(x+2)}{(x+2)^2(x-2)} \quad x \neq -2, \ x \neq 2$$

$$3x - 6 = 2x + 4$$

$$x = 10 \quad acc.$$