

2.2

1) $z^2 = 25$

$$z^2 - 25 = (z + 5)(z - 5) = 0$$

$$z = -5 \quad \text{ou} \quad z = 5$$

2) $z^2 = -169$

$$z^2 + 169 = 0$$

$$z^2 - 169i^2 = (z + 13i)(z - 13i) = 0$$

$$z = -13i \quad \text{ou} \quad z = 13i$$

3) $z^2 = -20$

$$z^2 + 20 = 0$$

$$z^2 - 20i = (z + \sqrt{20}i)(z - \sqrt{20}i) = (z + 2\sqrt{5}i)(z - 2\sqrt{5}i) = 0$$

$$z = -2\sqrt{5}i \quad \text{ou} \quad z = 2\sqrt{5}i$$