

ACHA 3000

2103851

$$3. i) x^2 + 4x + 14 = 0$$

$$(x+2)(x+7) = 0$$

$$x = -2 \text{ or } x = -7$$

$$4. 17x^2 = -5x + 14$$

$$17x^2 + 5x - 14 = 0$$

$$a = 17 \quad b = 5 \quad c = -14$$

$$ii) x^2 - 7x + 10 = 0$$

$$(x-2)(x-5) = 0$$

$$x = 2 \text{ or } x = 5$$

$$\frac{-5 \pm \sqrt{5^2 - (4 \times 17 \times -14)}}{2 \times 17}$$

$$iii) x^2 + 9x - 20 = 0$$

$$(x-2)(x+10) = 0$$

$$x = 2 \text{ or } x = -10$$

$$\frac{-5 \pm \sqrt{25 + 952}}{34}$$

$$\frac{-5 \pm \sqrt{977}}{34}$$

$$x = 0.77 \text{ or } x = -1.07$$

$$iv) x^2 - 49 = 0$$

$$(x+7)(x-7) = 0$$

$$x = -7 \text{ or } x = 7$$

$$v) 2x^2 - 3x - 20 = 0$$

$$(2x+5)(x-4) = 0$$

$$x = -2.5 \text{ or } x = 4$$

$$1 \quad 20$$

$$2 \quad 10$$

$$4 \quad 5$$

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