

2005342

I.

$$1. \quad x^2 + 8x + 15 = 0$$

$$(x+3)(x+5) = 0$$

$$x+3=0$$

$$x+5=0$$

$$x = \underline{\underline{-3}}$$

$$x = \underline{\underline{-5}}$$

II.

$$~~x^2 - 225~~ \quad x^2 - 225 = 0$$

$$x^2 = 225$$

$$x = \sqrt{225}$$

$$x = \underline{\underline{15}}$$

III.

$$x^2 + 11x + 30 = 0$$

$$(x+5)(x+6) = 0$$

$$x+5=0$$

$$(x+6)=0$$

$$\underline{\underline{x = -5}}$$

$$\underline{\underline{x = -6}}$$

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IV.

$$x^2 - 6x + 8 = 0$$

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

$$(x-2) = 0$$

$$\underline{x = 2}$$

$$(x-4) = 0$$

$$x = \underline{4}$$

V.

$$2x^2 + 9x + 7 = 0$$

$$(2x+7)(x+1) = 0$$

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

$$2x = -7$$

$$x = \underline{\underline{3,5}}$$

$$(x+1) = 0$$

$$x = \underline{\underline{-1}}$$

⑦

$$12x^2 + 5x - 7 = 0$$

$$12x^2 + 5x - 7 = 0$$

$$x = \frac{-5 \pm \sqrt{5^2 - 4(12)(-7)}}{24}$$

$$x = \frac{-5 \pm \sqrt{25 - 4(-84)}}{24}$$

$$x = \frac{-5 \pm \sqrt{25 + 336}}{24}$$

$$x = \frac{-5 \pm \sqrt{361}}{24}$$

$$x = \frac{-5 - 19}{24}$$

$$x = \underline{\underline{-1,00}}$$

$$x = \frac{-5 + 19}{24}$$

$$x = \frac{14}{24} = \underline{\underline{0,58}}$$

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$$5x + 2y = 22$$

$$4x + 3y = 19$$

$$4(5x + 2y) = 22$$

$$5(4x + 3y) = 19$$

$$20x + 8y = 22$$

$$- (20x + 15y) = 19$$

$$- 7y = 3$$

$$y = 0,42$$

$$5x + 2(0,42) = 22$$

$$5x + 0,84 = 22$$

$$5x = 22 - 0,84$$

$$5x = 21,16$$

$$x = 4,24$$

$$x = 4,24$$

$$y = 0,8$$

4

$$I. x^8 \cdot x \cdot x^9 = x^{18}$$

$$II. (2x^3)^3 = 2x^9$$

$$III. \frac{x^{12} \cdot x^8}{x} = \frac{x^{20}}{x}$$

$$IV. 5x^2 \cdot 3x^4 = 15x^6$$

$$V. \frac{10x^5}{2x^2} = 5x^3$$

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⑤

$$2(x^2+y^2)+x^2(x-y)+3xy-x^3=2x^2+2y^2+x^3-xy+3xy-x^3$$

$$2x^2+2y^2-xy+3xy$$

⑥

$$①. 5(2x+1)=4(3x+2)$$

$$10x+5=12x+8$$

$$10x-12x=8-5$$

$$-2x=3$$

$$x=\underline{\underline{-1,5}}$$

②

$$12x+5=4x-1$$

$$12x-4x=-1-5$$

$$8x=-6$$

$$x=\underline{\underline{0,75}}$$

③

$$\frac{(4x-1)(5x+2)}{3}=\frac{2}{2}$$

$$15x+6=8x-2$$

$$15x-8x=-2-6$$

$$7x=-8$$

$$x=\underline{\underline{1,14}}$$

(I)

~~scribbles~~

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~~scribbles~~

(III)

$$x^2 + 5^2 = 8^2$$

$$x^2 + 25 = 64$$

$$x^2 = 64 - 25 = 39$$

$$x^2 = \sqrt{39}$$

$$x = 6,24$$

$$\underline{\underline{AC = 6,24}}$$