

Black dot at the intersection of

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

$$y = 2x - 3$$

$$x^2 - 6x + (2x - 3)^2 = 0$$

$$x^2 - 6x + 4x^2 - 12x + 9 = 0$$

$$5x^2 - 18x + 9 = 0$$

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

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