

$$V2 \cdot \sin(PVx \cdot V(5/x - x + 6)) + V6 \cdot \cos(P \cdot x \cdot V(5/x^2 + 6/x - 1)) = V8$$

$$V2 \cdot \sin(PV(x(5/x - x + 6))) + V6 \cdot \cos(P \cdot V(x^2(5/x^2 + 6/x - 1))) = V8$$

$$V2 \cdot \sin(PV(5 - x^2 + 6x)) + V6 \cdot \cos(PV(5 + 6x - x^2)) = V8$$

$$PV(5 - x^2 + 6x) = t$$

$$V2 \sin t + V6 \cos t = V8$$

$$V2 \sin t + V6 \cos t = V8 [\sin t \cdot V2/V8 + \cos t \cdot V6/V8] = V8 [\sin t \cdot \cos P/3 + \cos t \cdot \sin P/3] = V8 \cdot \sin(t + P/3)$$

$$\cos g = 1/2$$

$$\sin g = \sqrt{3}/2$$

$$g = P/3$$

$$V8 \sin(t + P/3) = V8$$

$$\sin(t + P/3) = 1$$

$$t + P/3 = P/2 + 2Pk$$

$$t = P/2 - P/3 + 2Pk$$

$$t = P/6 + 2Pk$$

$$PV(5 - x^2 + 6x) = P/6 + 2Pk$$

$$V(5 - x^2 + 6x) = \frac{1}{6} + 2k$$

$$\frac{1}{6} + 2k \geq 0$$

$$2k \geq -\frac{1}{6}$$

$$k \geq -1/12$$

$$k \geq 0$$

$$6V(5 - x^2 + 6x) = 1 + 12k$$

$$36 \cdot (5 - x^2 + 6x) = (1 + 12k)^2$$

$$5 - x^2 + 6x = (1 + 12k)^2 / 36$$

$$x^2 - 6x - 5 + (1 + 12k)^2 / 36 = 0$$

$$x^2 - 6x + [-180 + 1 + 24k + 144k^2] / 36 = 0$$

$$x^2 - 6x + [-179 + 24k + 144k^2] / 36 = 0$$

$$D/4 = 9 - [-179 + 24k + 144k^2] / 36 = [324 + 179 - 24k - 144k^2] / 36 = [503 - 24k - 144k^2] / 36$$

$$[503 - 24k - 144k^2] / 36 \geq 0$$

$$503 - 24k - 144k^2 \geq 0$$

$$144k^2 + 24k - 503 \leq 0$$

$$k = 0 \quad k = 1$$

ОДЗ

$$5/x - x + 6 \geq 0$$

$$5/x^2 + 6/x - 1 \geq 0$$

$$x > 0$$

1 case

$$k = 0$$

$$D/4 = 503/36$$

$$x = 3 \pm \sqrt{503/36}$$

2 case

$$D/4 = 335/36$$

$$x = 3 \pm \sqrt{335/36}$$

$$5/x - x + 6 \geq 0$$

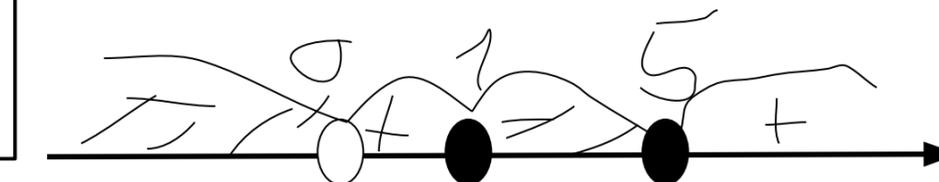
$$(5 - x^2 + 6x)/x \geq 0 \Leftrightarrow |x(5 - x^2 + 6x)| \geq 0$$

$$|x| \neq 0$$

$$(x^2 - 6x + 5)/x \leq 0$$

$$(x - 1)(x - 5)/x \leq 0$$

$$X \in (-\infty; 0) \cup [1; 5]$$



$$\sqrt{a} \cdot \sqrt{b} = \sqrt{a \cdot b}$$

$$a \geq 0, b \geq 0$$

~~$$\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$$~~

$$\sqrt{335/36} > 3$$

$$(335/36) \sim 9$$

$$335 \sim 9 \cdot 36$$

Ответ:

