Effectuez une rotation de chaque figure, en indiquant les nouvelles coordonnées.

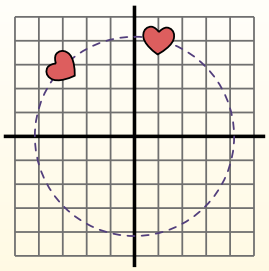
θ = Ângulo de rotação

Fórmula de rotación

$x1 = x \times \cos(\theta) - y \times \sin(\theta)$

$y1 = x \times \sin(\theta) + y \times \cos(\theta)$

En el ejemplo de la derecha, la forma está en las coordenadas (1,4).
Vamos encontrar as coordenadas se girarmos a forma em 60°.



1. $x1 = 1 \times \cos(60) - 4 \times \sin(60)$
$y1 = 1 \times \sin(60) + 4 \times \cos(60)$

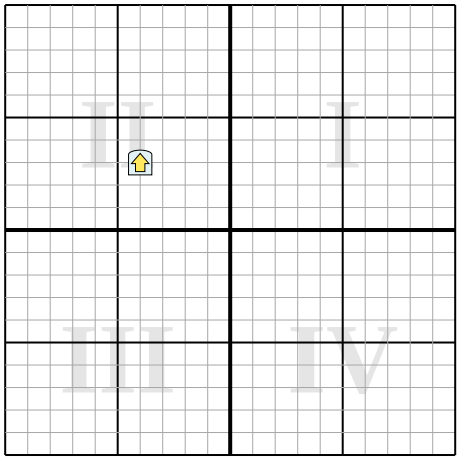
2. $x1 = 1 \times 0.5 - 4 \times 0.87$
$y1 = 1 \times 0.87 + 4 \times 0.5$

3. $x1 = 0.5 - 3.48$
$y1 = 0.87 + 2$

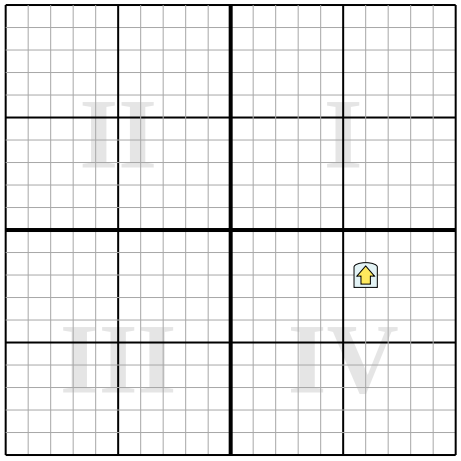
4. $x1 = -2.98$
$y1 = 2.87$

5. Al observar la forma, podemos ver que girado 60 ° está en (-2.98, 2.87).

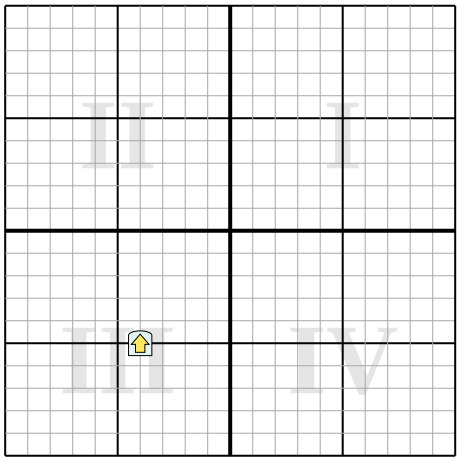
1) Effectuez une rotation de -53° autour du point (0,0).



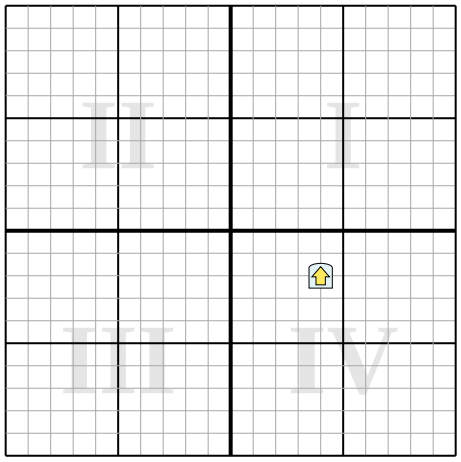
2) Effectuez une rotation de 235° autour du point (0,0).



3) Effectuez une rotation de 37° autour du point (0,0).



4) Effectuez une rotation de -129° autour du point (0,0).



Réponses

1. _____
2. _____
3. _____
4. _____

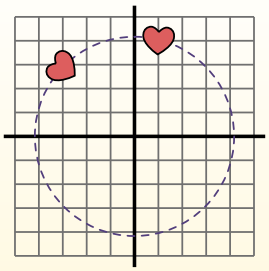
1-4	75	50	25	0

Effectuez une rotation de chaque figure, en indiquant les nouvelles coordonnées.

θ = Ângulo de rotação

Fórmula de rotación
x1 = x×cos(θ) - y×sin(θ)
y1 = x×sin(θ) + y×cos(θ)

En el ejemplo de la derecha, la forma está en las coordenadas (1,4).
Vamos encontrar as coordenadas se girarmos a forma em 60°.



1. x1 = 1×cos(60) - 4×sin(60)
y1 = 1×sin(60) + 4×cos(60)

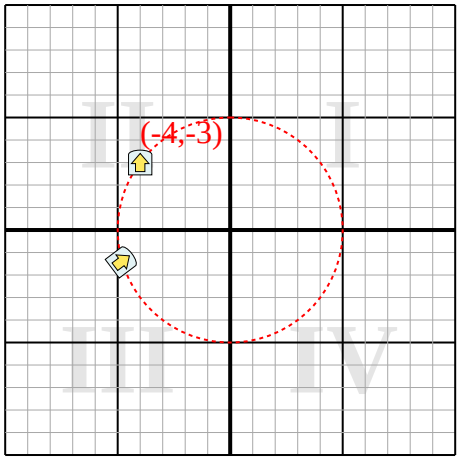
2. x1 = 1×0.5 - 4×0.87
y1 = 1×0.87 + 4×0.5

3. x1 = 0.5 - 3.48
y1 = 0.87 + 2

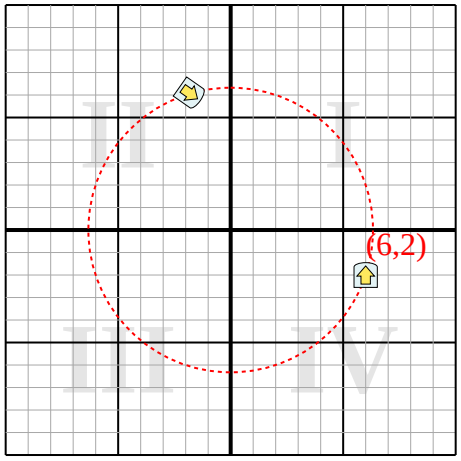
4. x1 = -2.98
y1 = 2.87

5. Al observar la forma, podemos ver que girado 60 ° está en (-2.98, 2.87).

1) Effectuez une rotation de -53° autour du point (0,0).



2) Effectuez une rotation de 235° autour du point (0,0).



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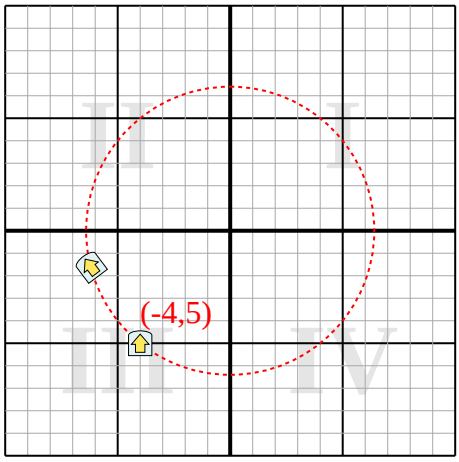

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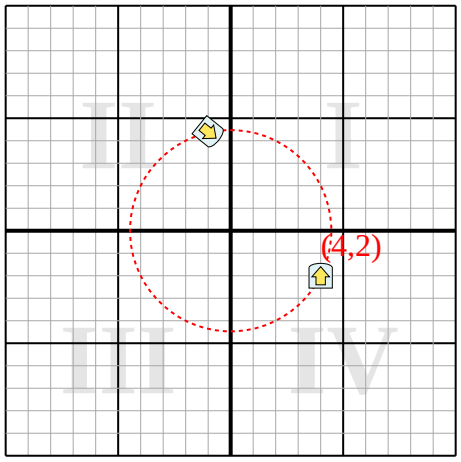

Réponses

1. **(-4,8,-1,4)**
2. **(-1,8,6,1)**
3. **(-6,2,-1,6)**
4. **(-1,4,4)**

1-4	75	50	25	0