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

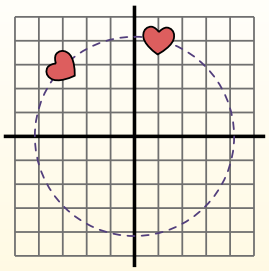
θ = Ângulo de rotação

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

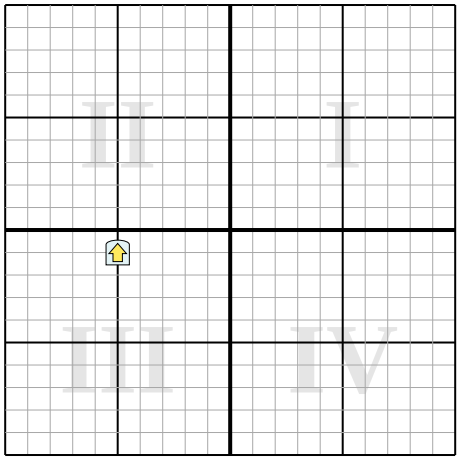
2. $x1 = 1 \times 0.5 - 4 \times 0.87$
$y1 = 1 \times 0.87 + 4 \times 0.5$

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

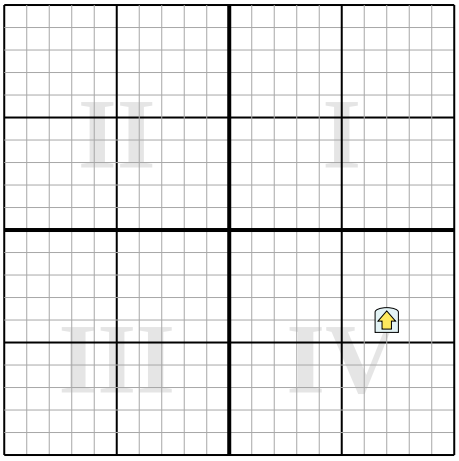
4. $x1 = -2.98$
$y1 = 2.87$

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

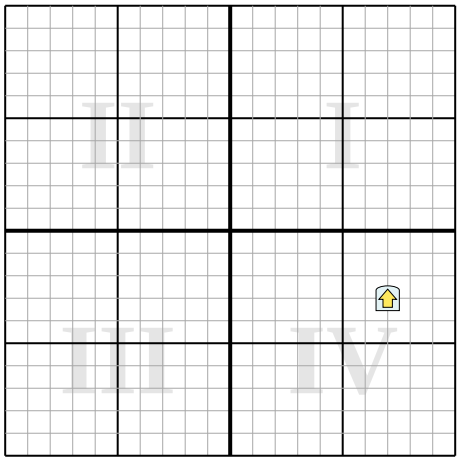
1) Effectuez une rotation de -154° autour du point (0,0).



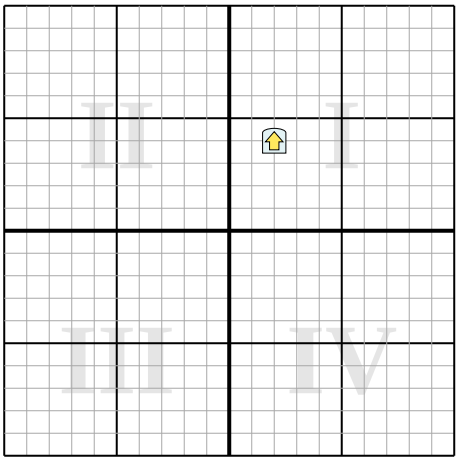
2) Effectuez une rotation de 182° autour du point (0,0).



3) Effectuez une rotation de 204° autour du point (0,0).



4) Effectuez une rotation de -127° 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.

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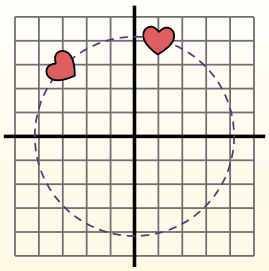

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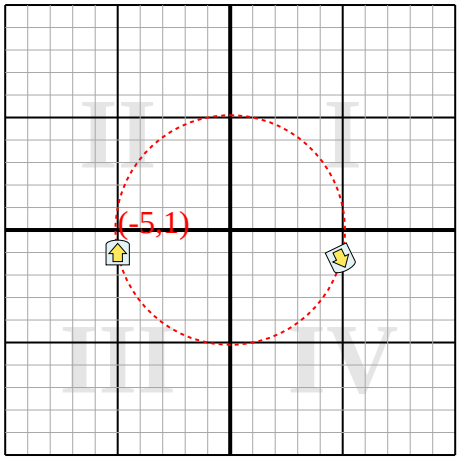
1) Effectuez une rotation de -154° autour du point (0,0).



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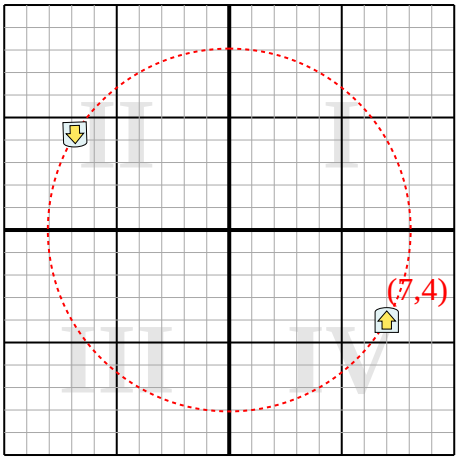

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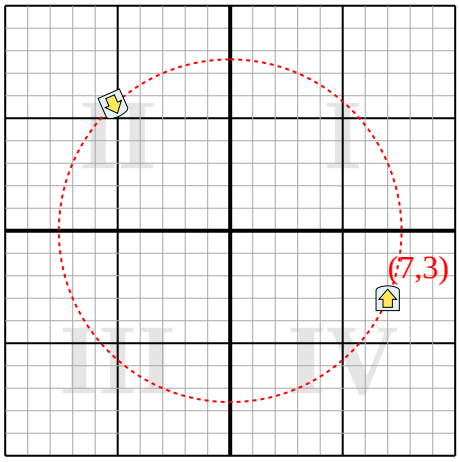

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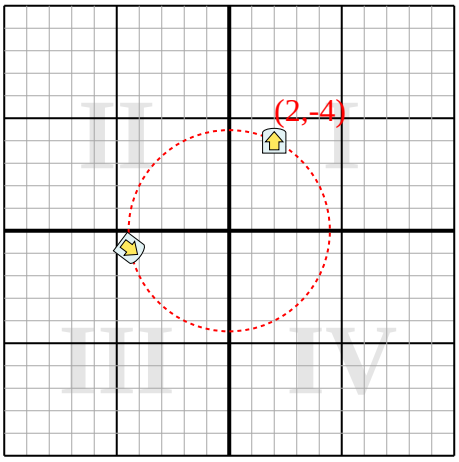

Réponses

1. **(4,9,-1,3)**
2. **(-6,9,4,2)**
3. **(-5,2,5,6)**
4. **(-4,4,-0,8)**

1-4	75	50	25	0