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# Quiz review

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# Nested Loop

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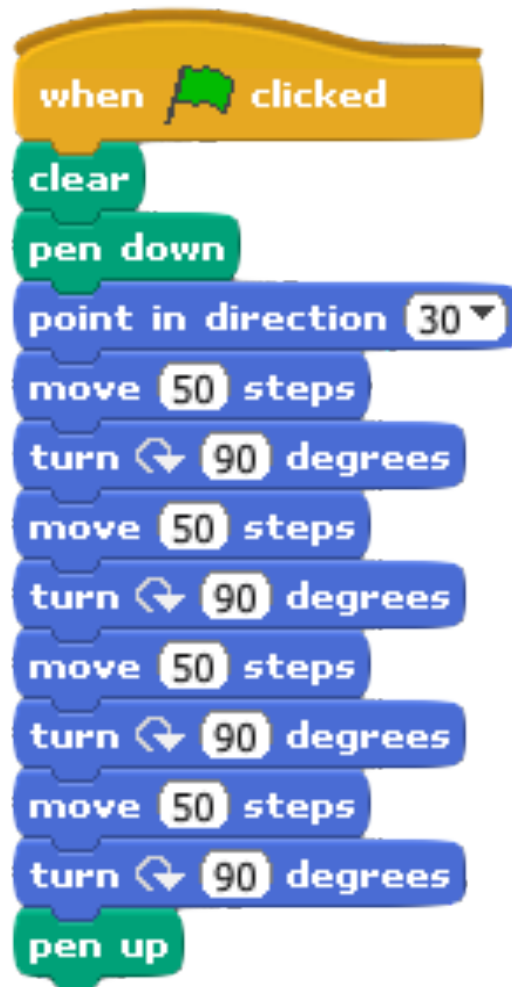
# If + Loops + Variables

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# Sprite Position

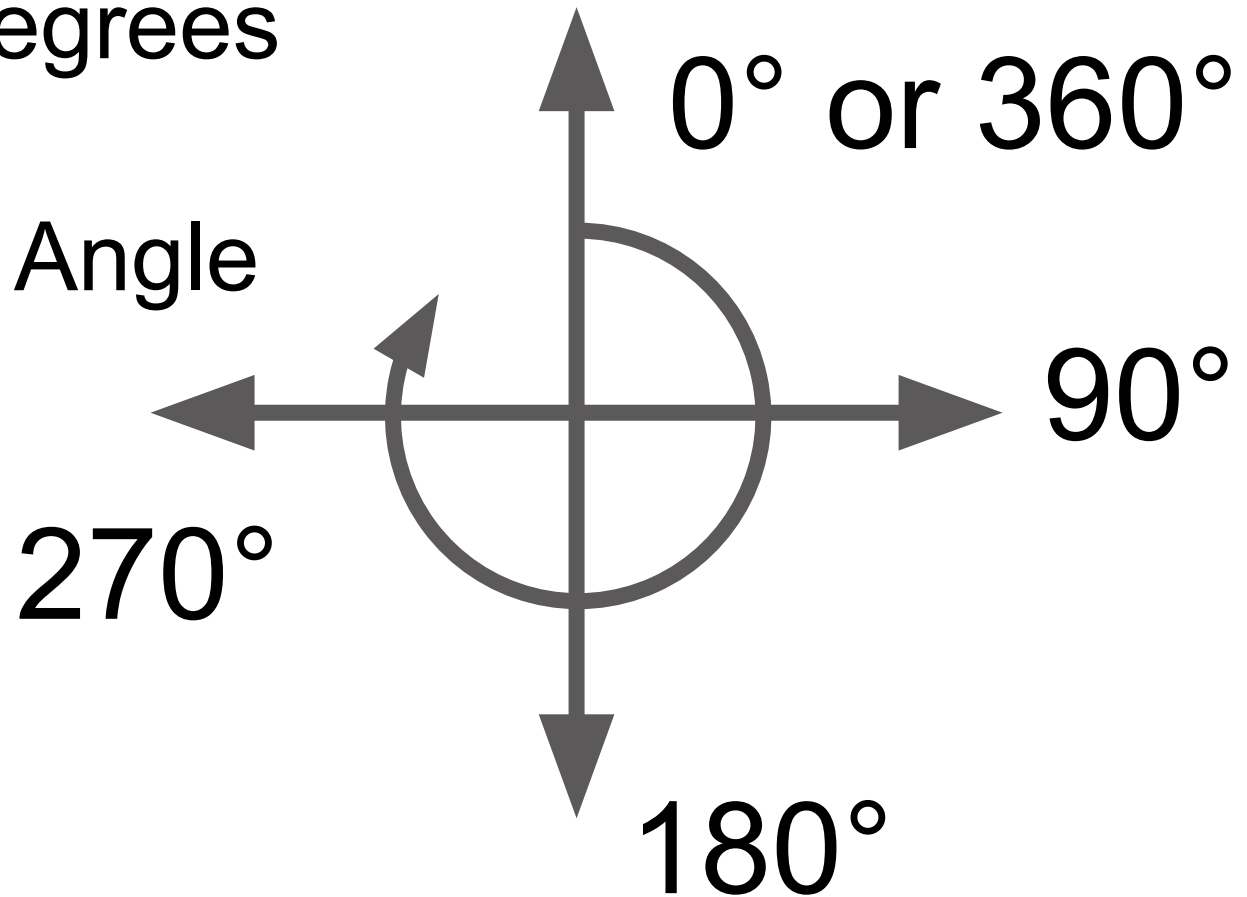
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# Coordinates

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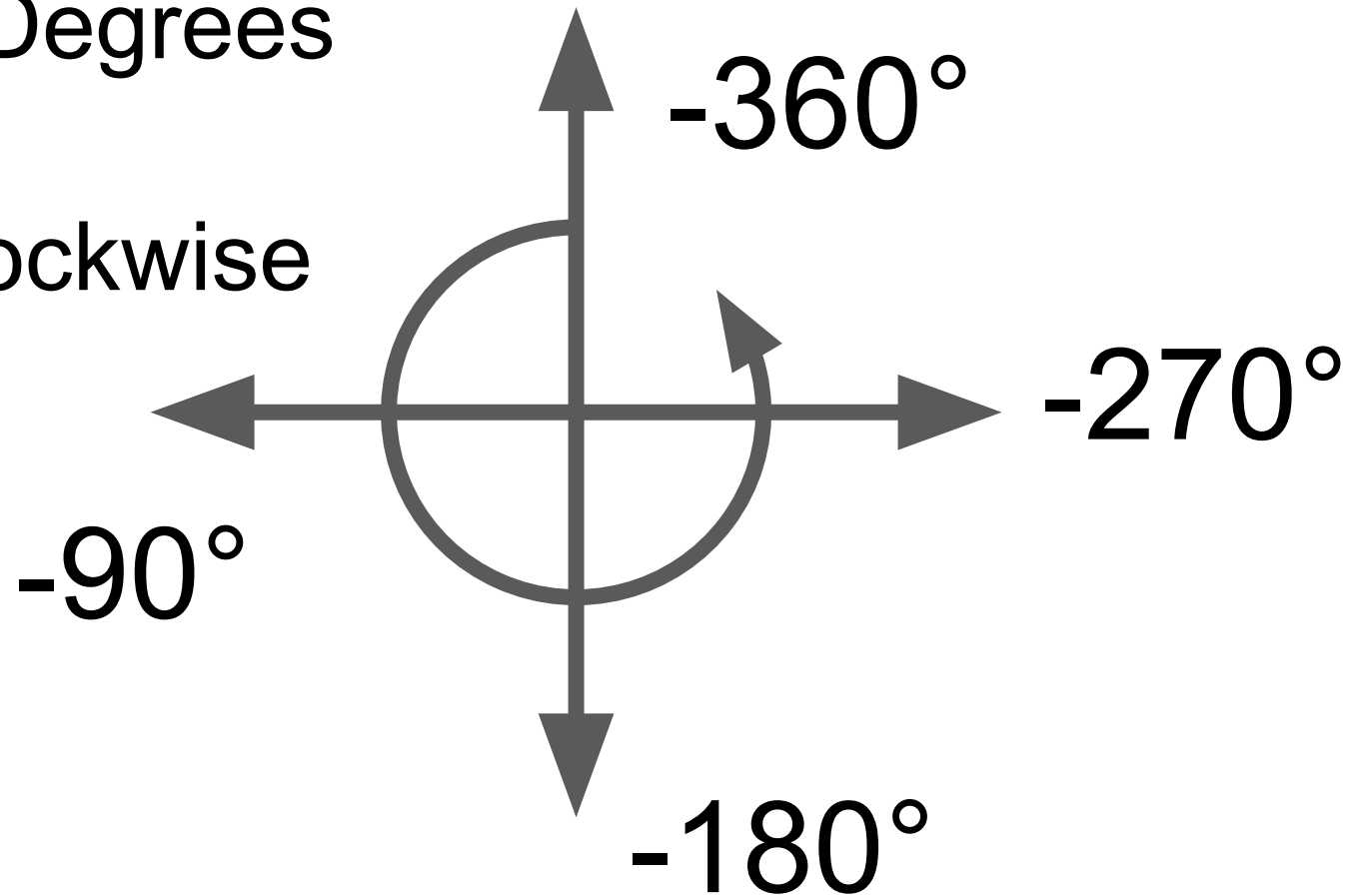
Positive Degrees  
=  
Clockwise Angle



# Coordinates

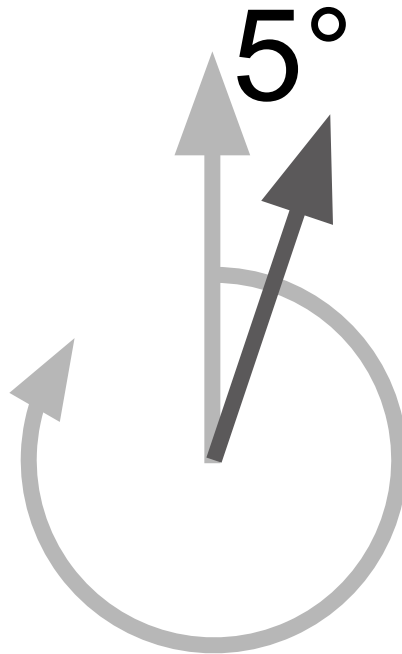
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Negative Degrees  
=  
Counter-clockwise



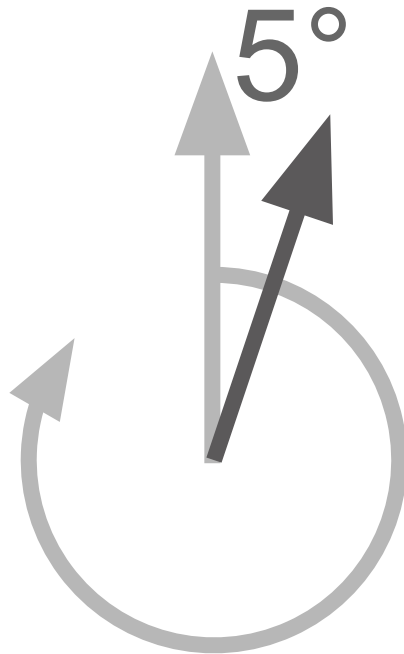
# What's the angle?

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# What's the angle?

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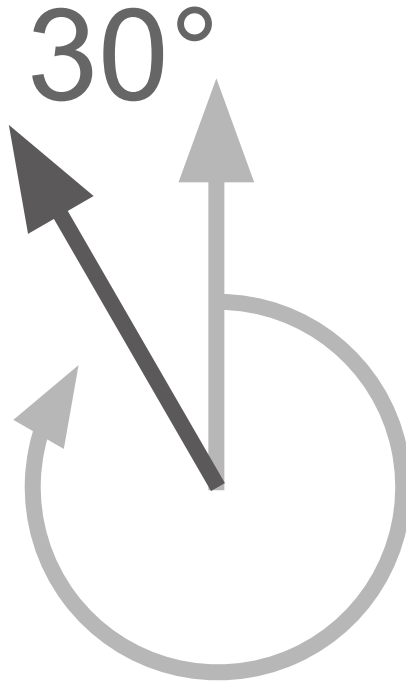
5°  
or  
-355°

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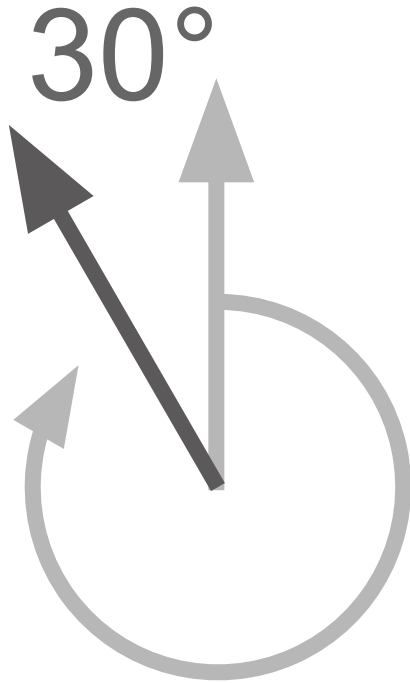
# What's the angle?

---



# What's the angle?

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$330^\circ$

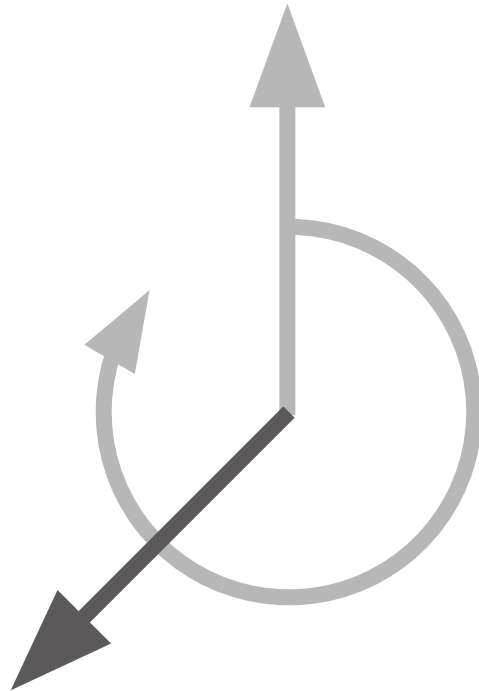
or

$-30^\circ$

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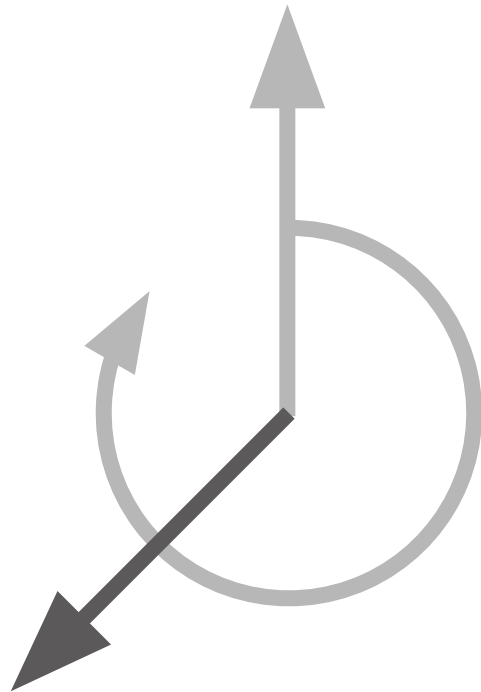
# What's the angle?

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# What's the angle?

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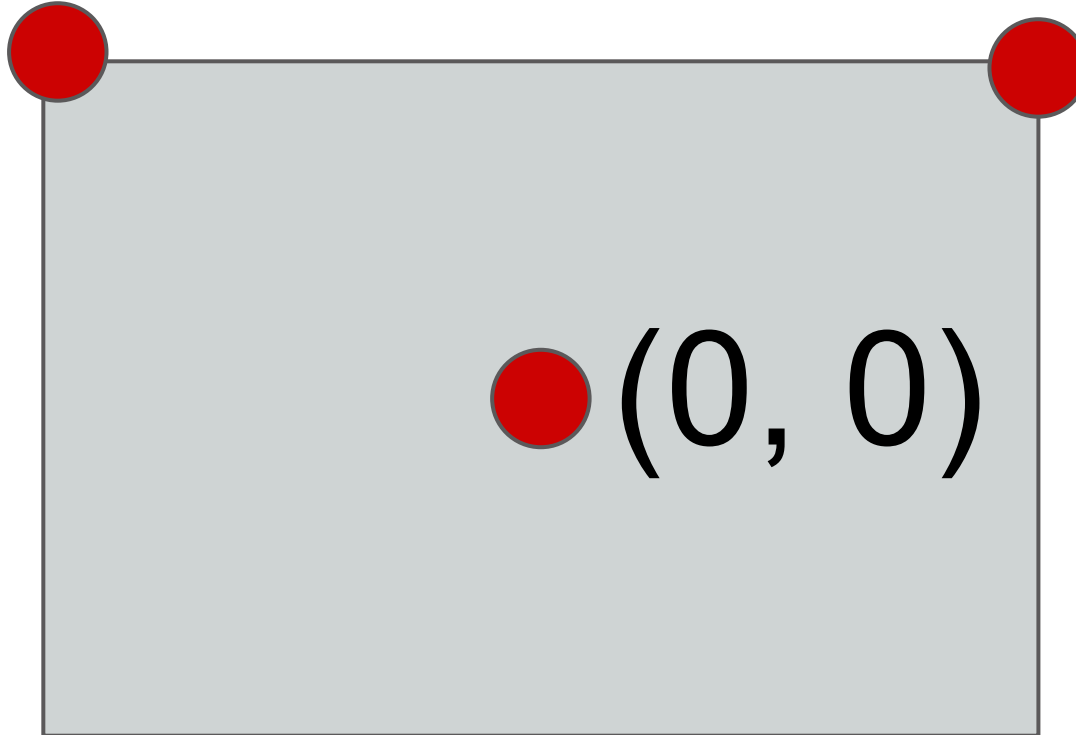
$225^\circ$   
or  
 $-135^\circ$

# Coordinates

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$(-240, 180)$

$(240, 180)$



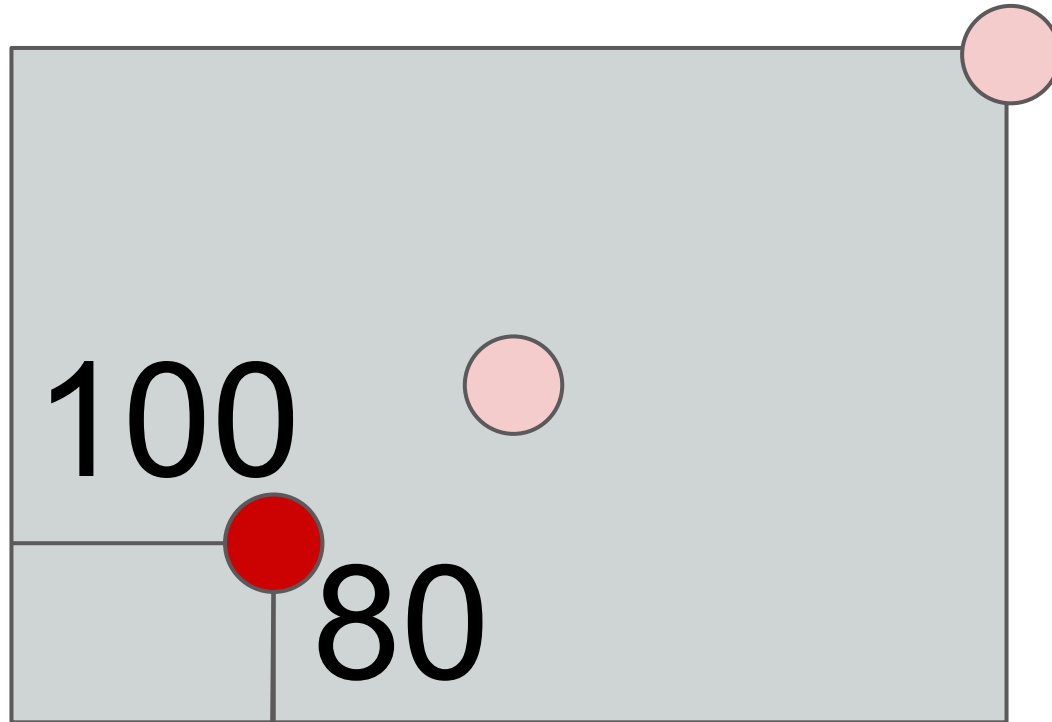
$(0, 0)$

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# What are the coordinates?

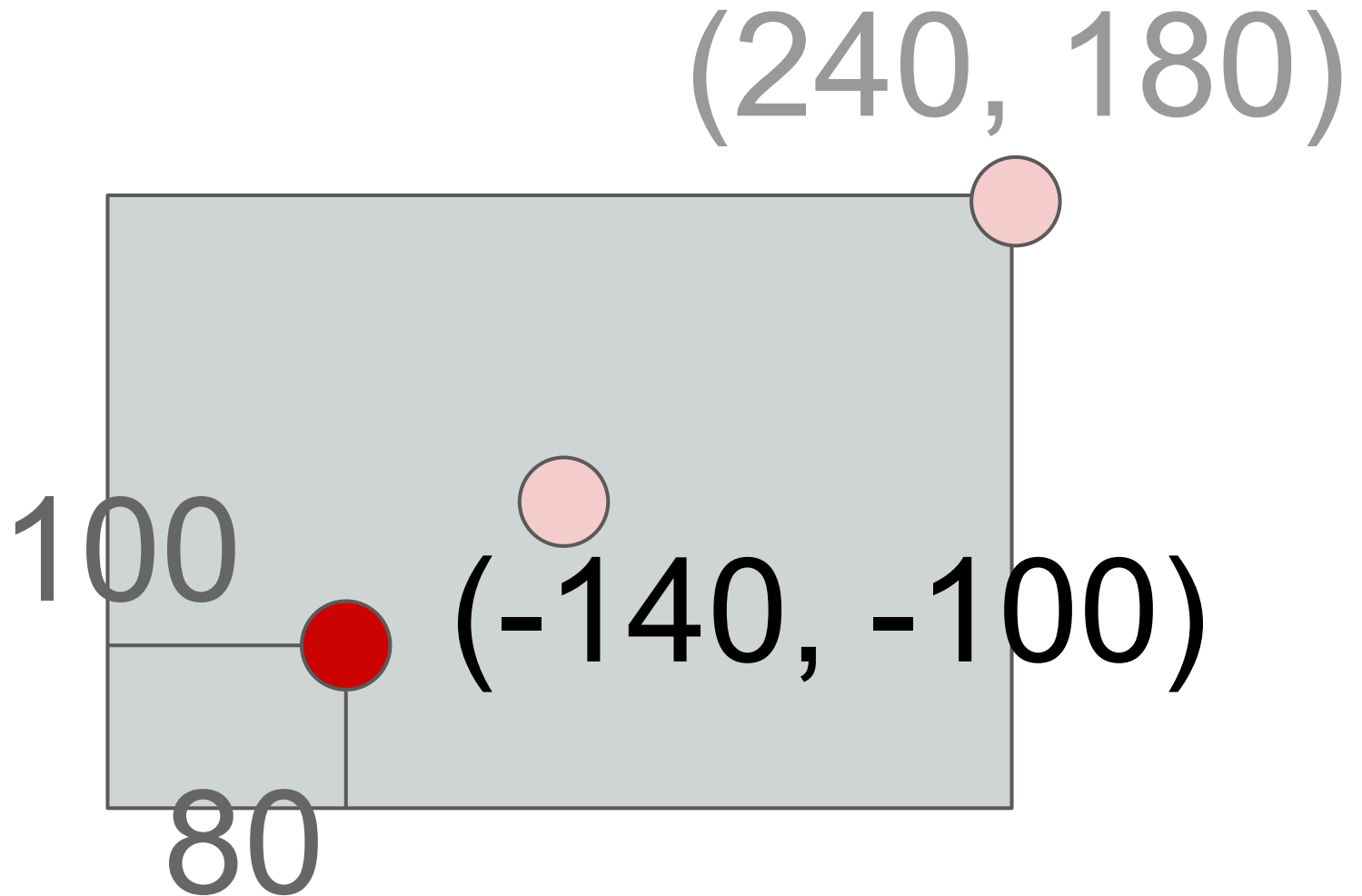
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(240, 180)



# What are the coordinates?

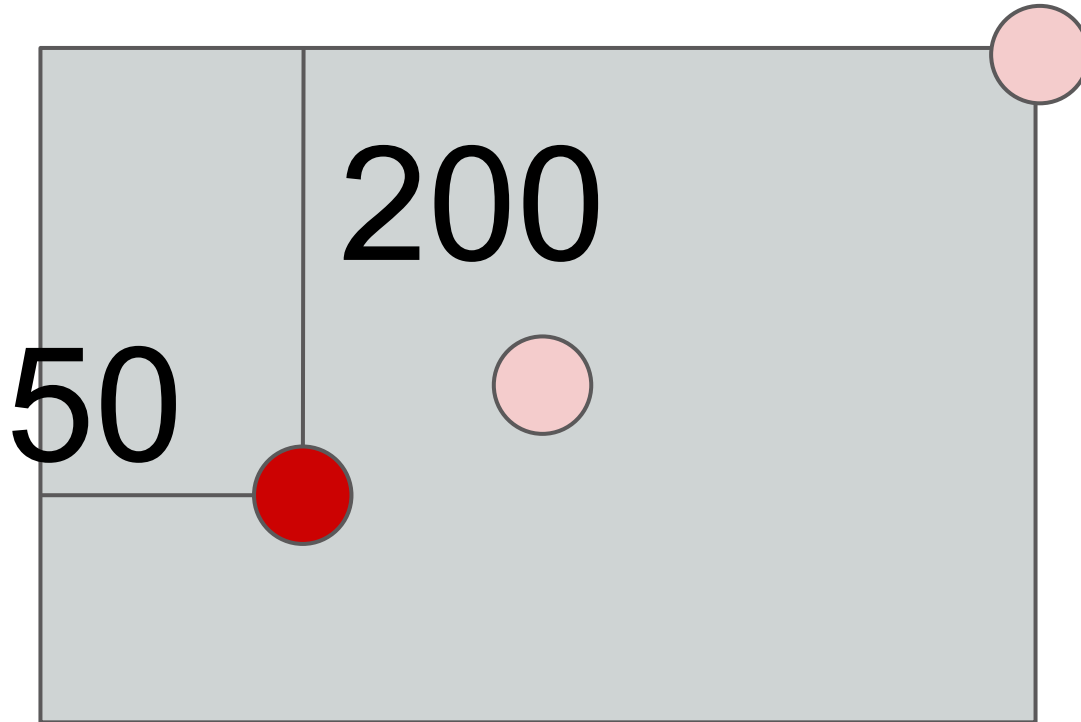
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# What are the coordinates?

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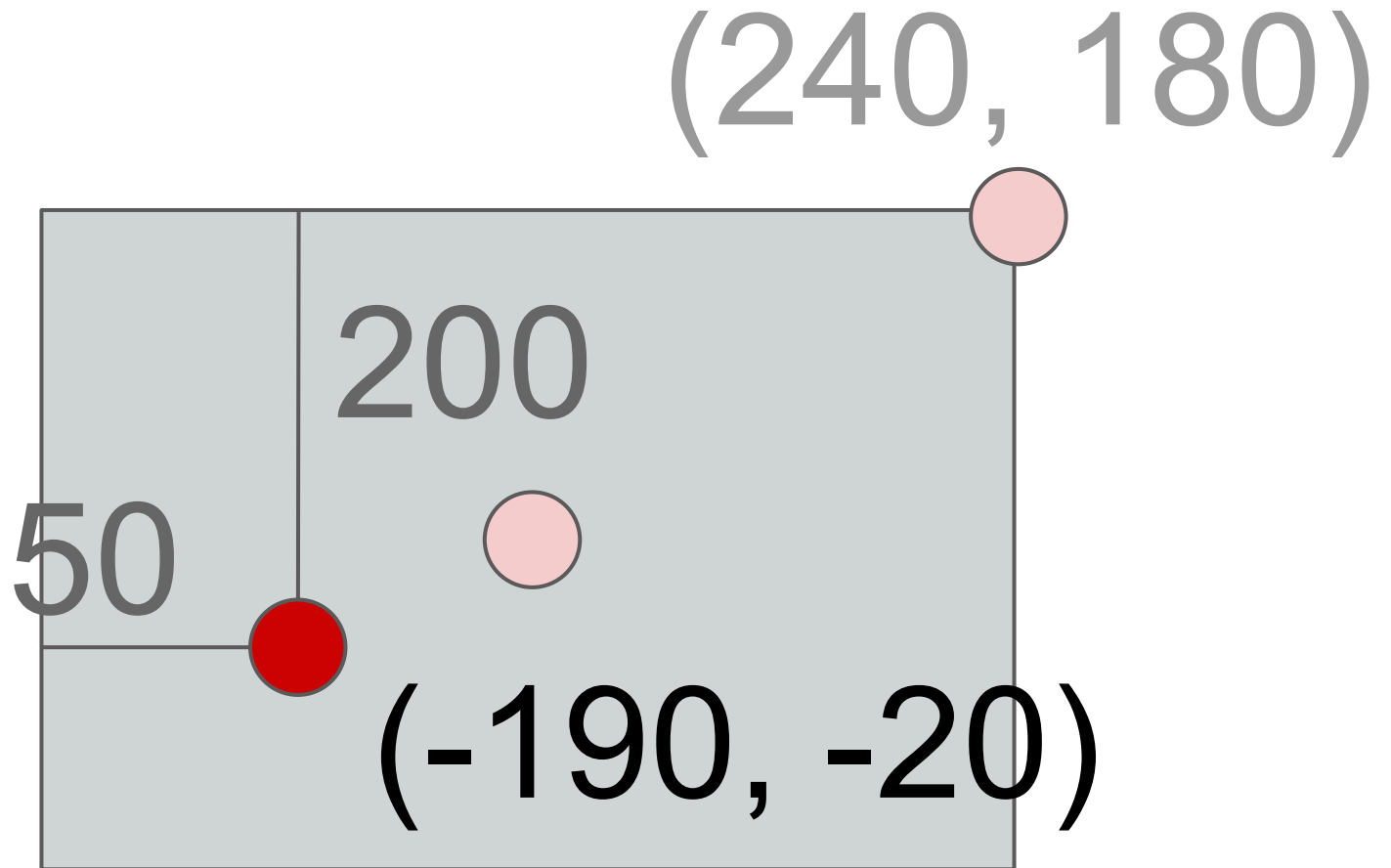
(240, 180)





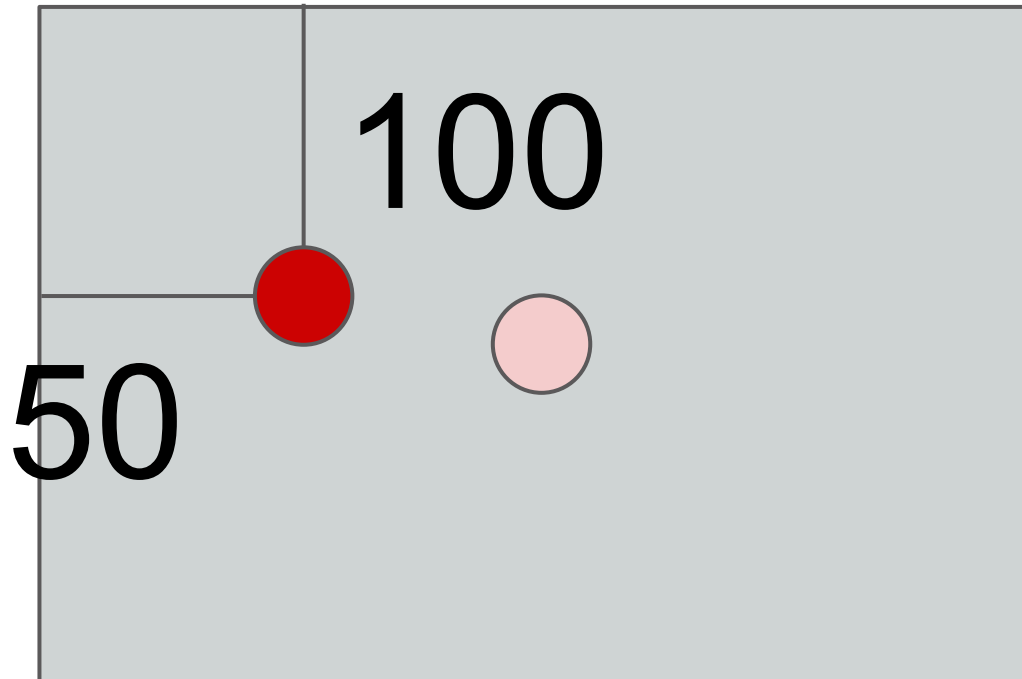
# What are the coordinates?

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# How to find the coordinates

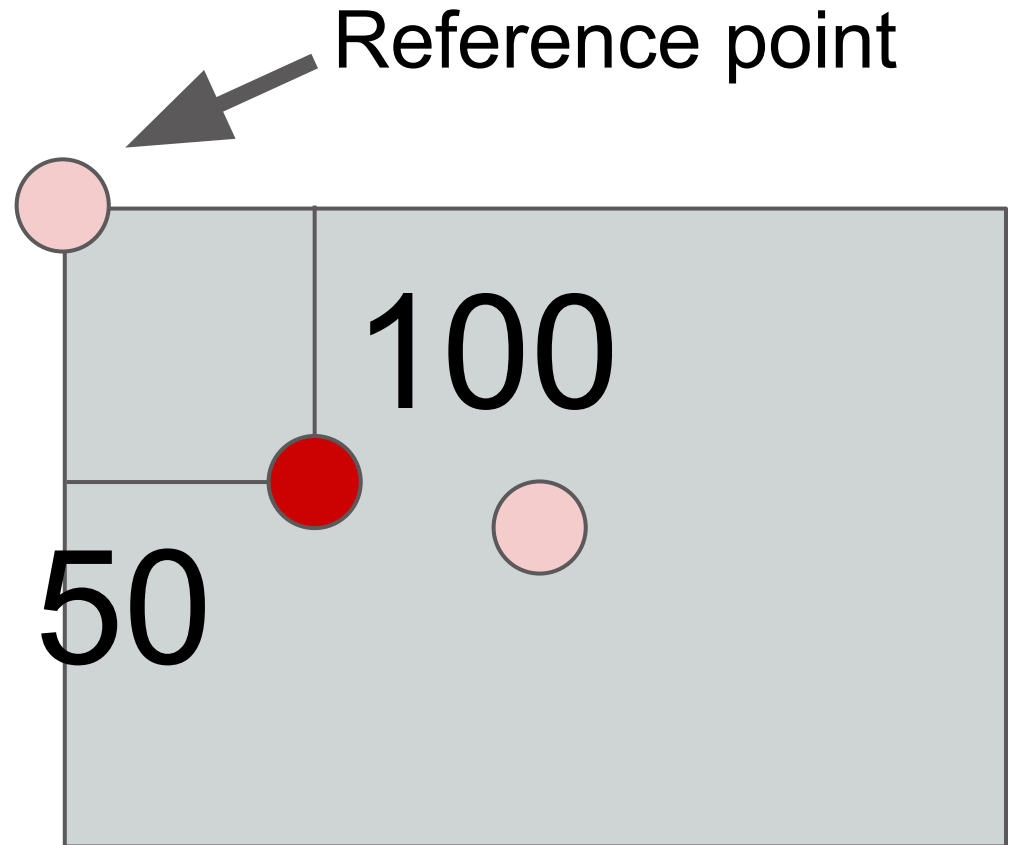
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# Find your reference point

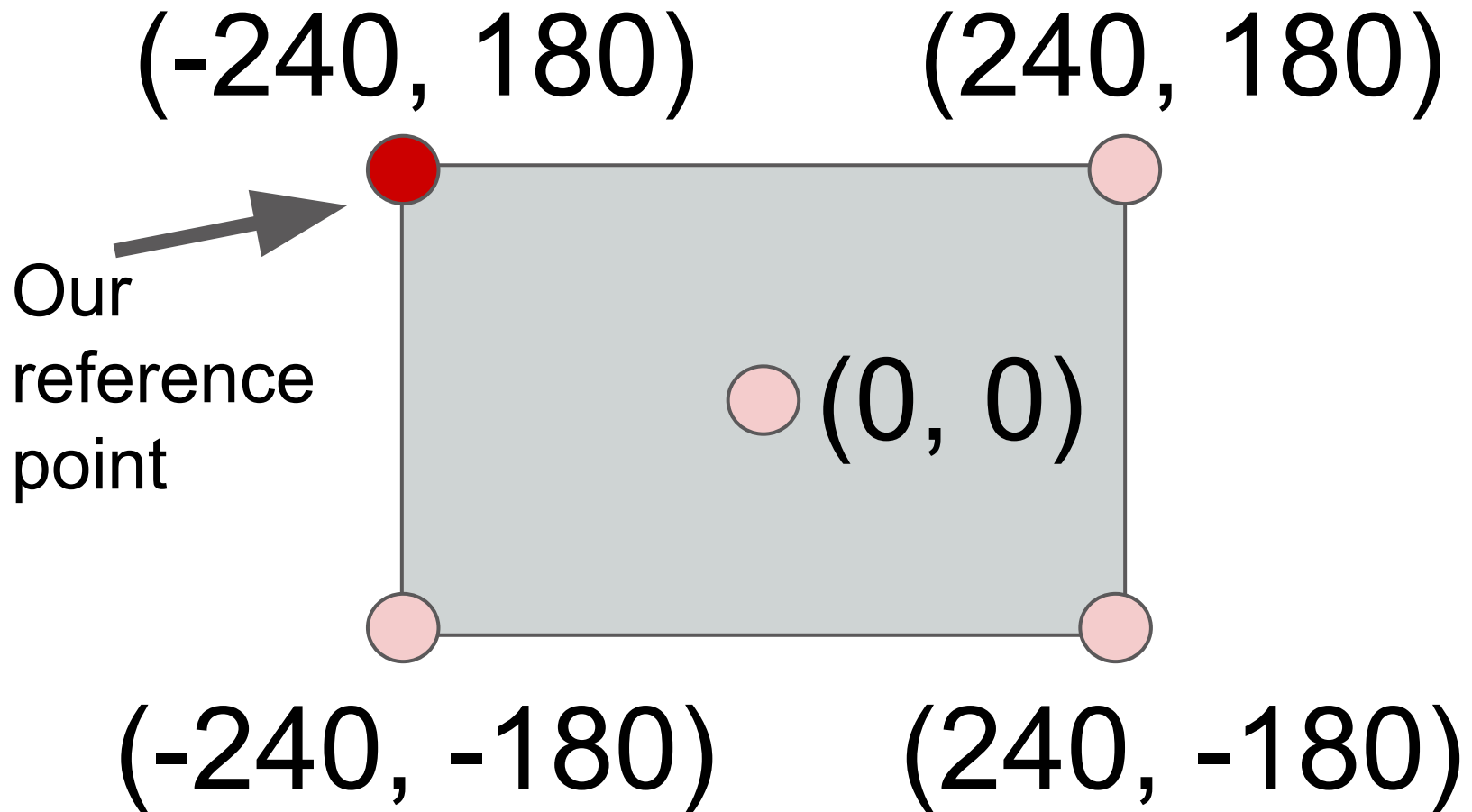
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Your reference point is the corner you know the distances from



# Find your reference point

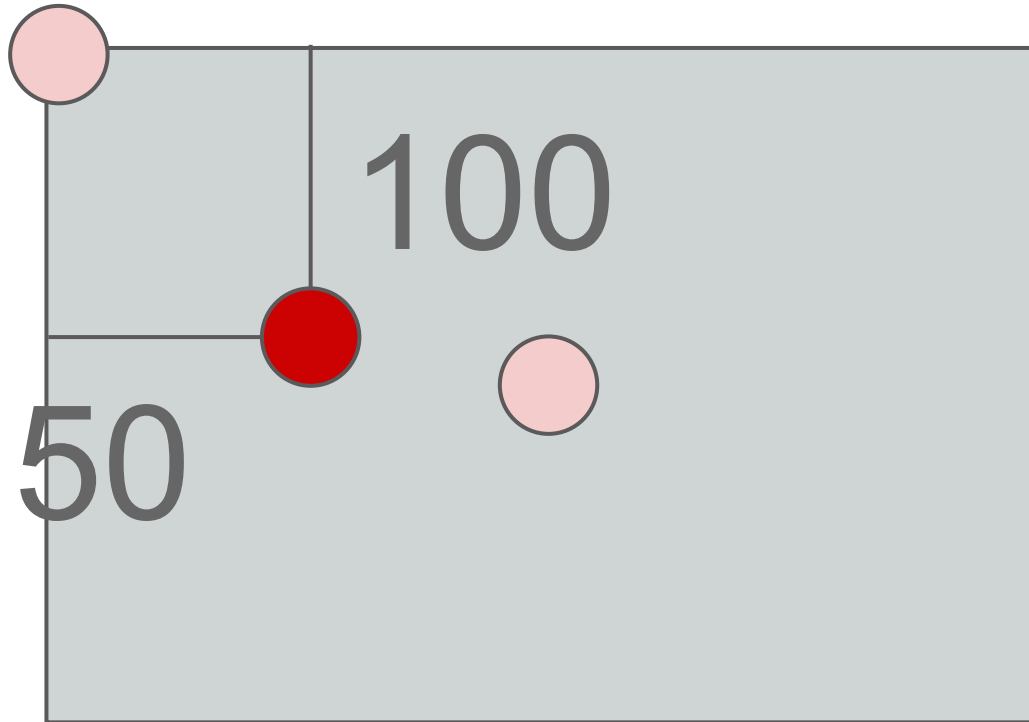
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# Find your reference point

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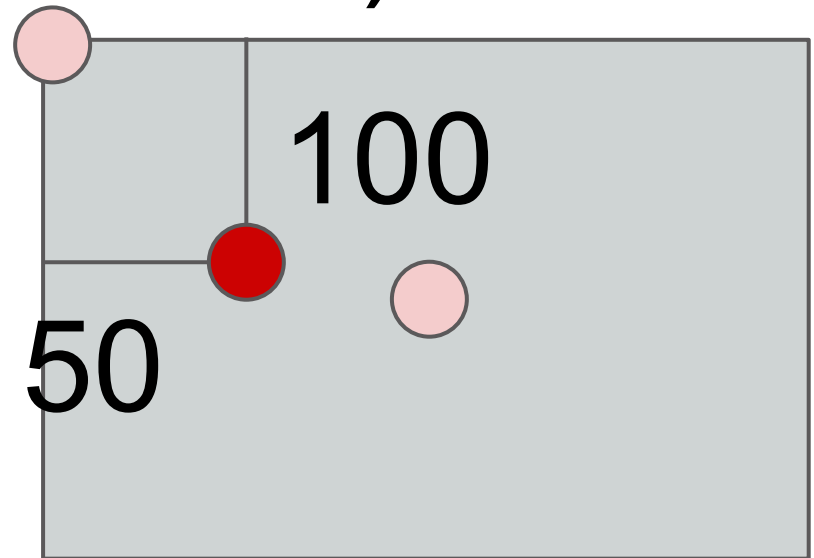
$(-240, 180)$



# Calculate the coordinates

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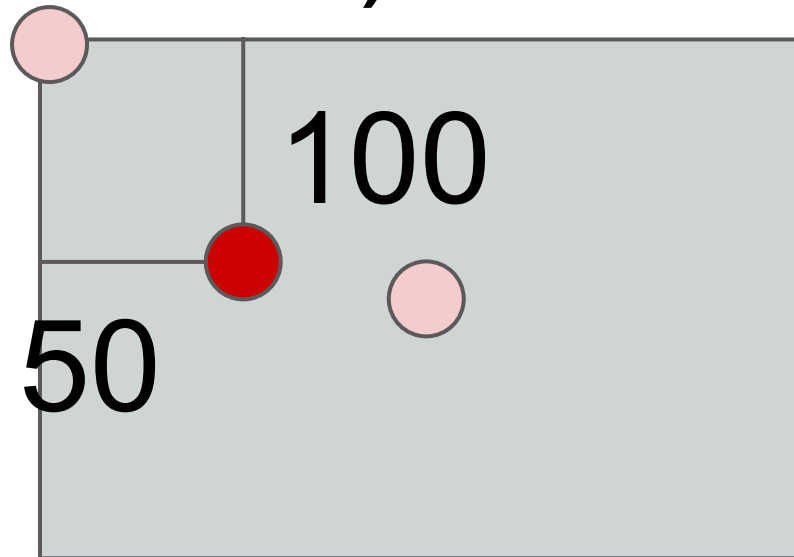
Add the distance to negative reference points and subtract from positive ones.  $(-240, 180)$



# Calculate the coordinates

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$(-240, 180)$



$$x = -240 + 50$$

$$x = -190$$

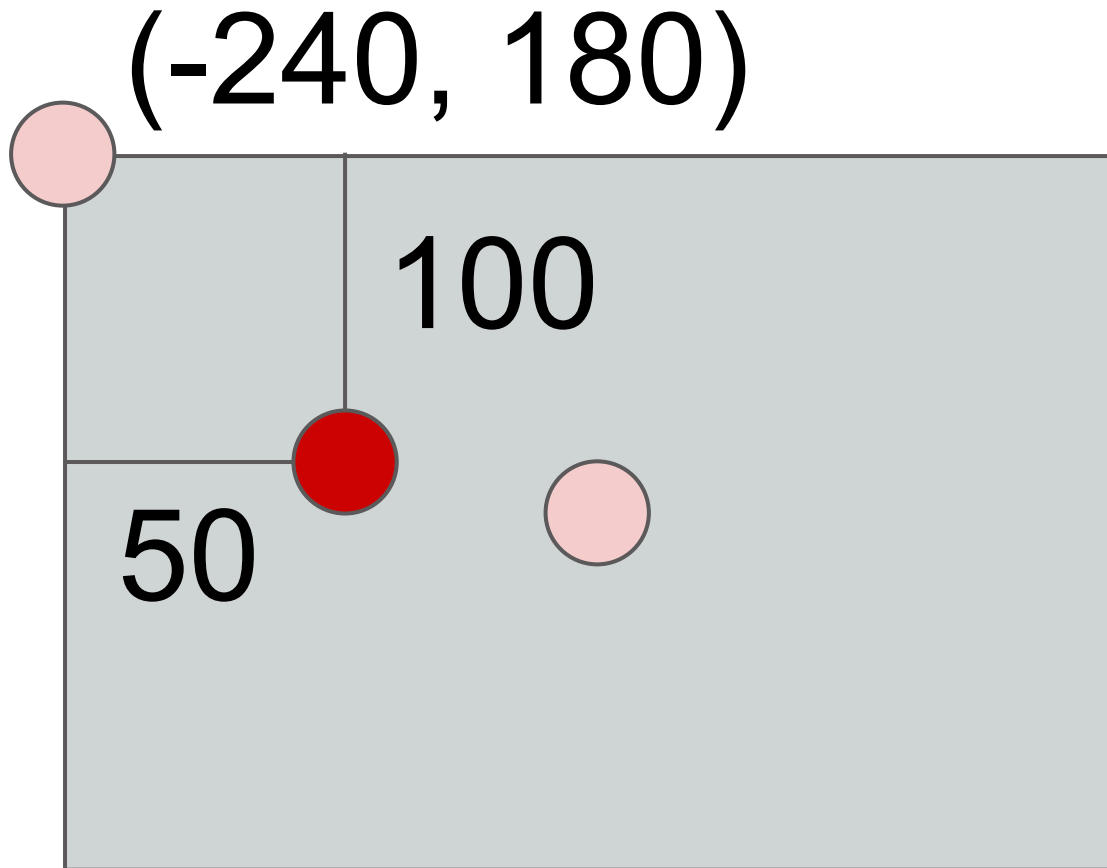
$$y = 180 - 100$$

$$y = 80$$

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# Calculate the coordinates

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$$x = -240 + 50$$

$$x = -190$$

$$y = 180 - 100$$

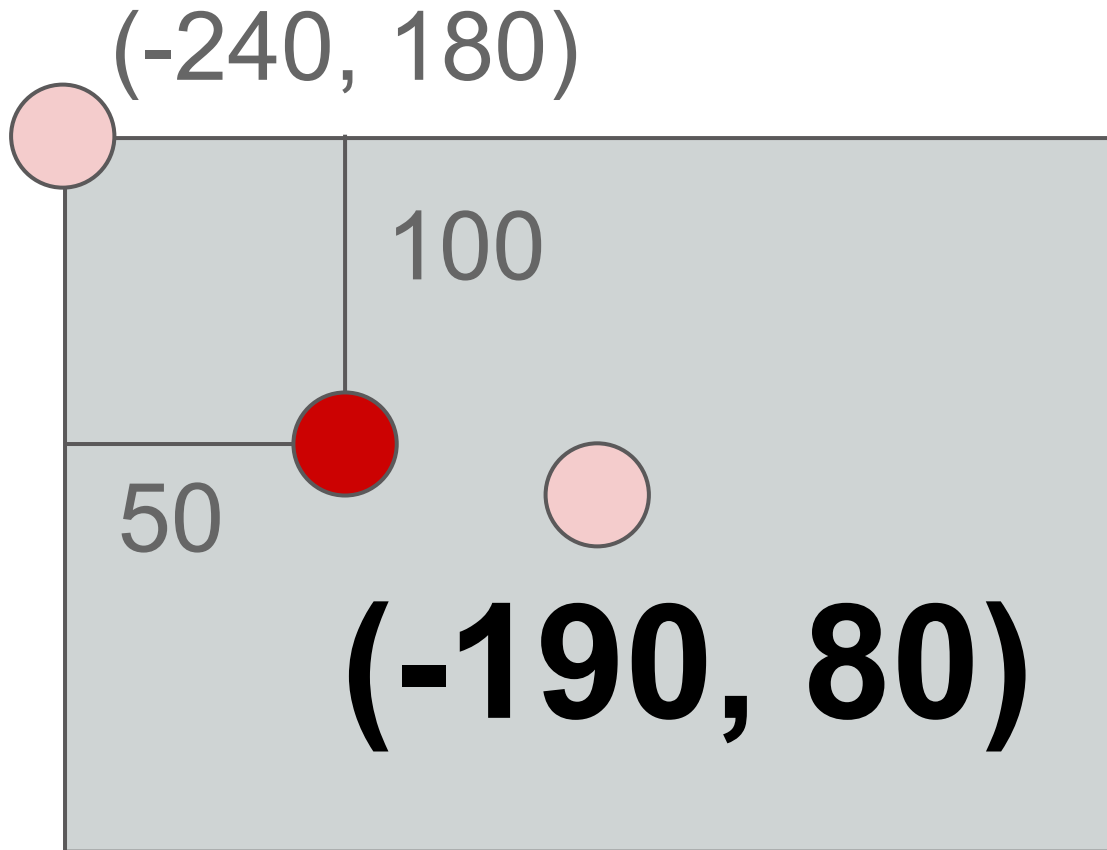
$$y = 80$$

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# What are the coordinates?

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$$x = -240 + 50$$

$$x = -190$$

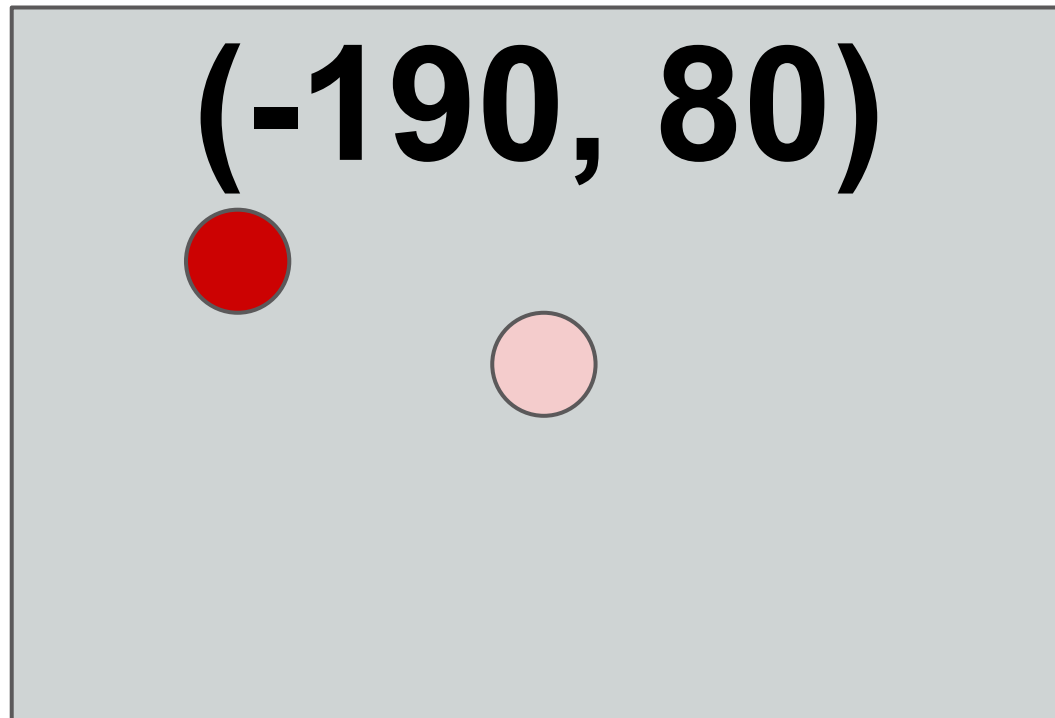
$$y = 180 - 100$$

$$y = 80$$

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# What are the coordinates?

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# Coordinates in BYOB

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Sprite1 x position

Sprite1 y position



The image shows a screenshot of a BYOB (Build Your Own Blocks) workspace. At the top left, there are two input fields for a sprite's position. The first field is labeled "Sprite1 x position" and contains the value "-190". The second field is labeled "Sprite1 y position" and contains the value "80". Below these fields, a small yellow, spiky cartoon character is positioned in the upper-left corner of the workspace. The workspace is a large white rectangle with a gray border.