

Decision making based on graphs: Introduction and Consent Form

Thank you for choosing to participate!

Before you proceed, please verify that we have your correct PROLIFIC ID recorded: . If not, please let us know.

In this study, you will take on the role of a business manager, and make decisions based on sales data presented with graphs.

You will review 30 business scenarios (trials) in total. The trials are divided into three blocks with a break in between. Before you work on the actual trials, you will learn about the graphs and practice with your task. You can also review the graphs and your task again before each block. Please read these instructions carefully as your task changes for each block.

The study should take about 15-20 minutes, and you will receive (at a minimum) \$5 for your participation. Your decisions will be scored as correct or incorrect. Based on the quality of your responses, you will be eligible for a bonus of up to \$4. You can quit at any point, but beware that you cannot resume once this window is closed, and nor will you be compensated. After you have finished all the trials, you will be redirected back to Prolific.

[Click here to read the Information Sheet for this study](#)

By clicking on "Yes" below, you indicate that you have understood the Information Sheet and agree to participate in this study.

Yes

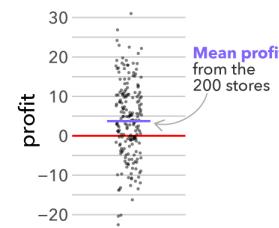
No

Tutorial

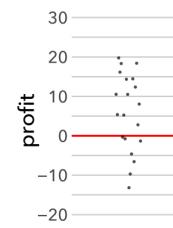
You will get to know your task on this tutorial page. You will then be asked to perform **five** training tasks. Please read carefully before proceeding to the actual study.

Background story of your task

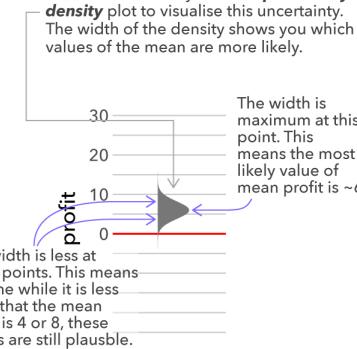
You are a manager supervising the sales of stores. In each region there are 200 stores. The graph below shows what the profit for each store looks like. Your task will be to guess whether the average profit of the stores in a region is greater than zero



However, you only receive the sales data for 20 stores, and you have to make the decision based on this limited information.



To help you with the decision, your business analyst used statistics and created a plot which shows an estimate of the mean profit. Since there are only 20 data points, this estimate of the mean will be uncertain. The analyst used a **probability density** plot to visualise this uncertainty. The width of the density shows you which values of the mean are more likely.



How your job performance is evaluated

Your job of picking out profitable regions without full sets of data is risky. You will win or lose corporate brownie points based on the rules below, and of course **your goal is to maximize your points for the next promotion** (and bonus pay).

- If you think a region is profitable on average and **mark it as profitable** it (based on the data from the 20 stores), and that region **does have** an average profit greater than zero based on all 200 stores, you will receive 50 points.
- If you **mark a region as not profitable**, and that region **does not** have a profit greater than zero on average, you will receive 10 points.
- If you **mark a region as profitable**, and that region **does not** have a profit greater than zero, on average, you will lose 150 points.
- If you **mark a region as not profitable**, and that region **does have** a profit greater than zero, on average, you will lose 40 points.

	region profit > 0	region profit < 0
Mark a region as profitable	Win 50 points	Lose 150 points
Mark a region as not profitable	Lose 40 points	Win 10 points

How you will be rewarded

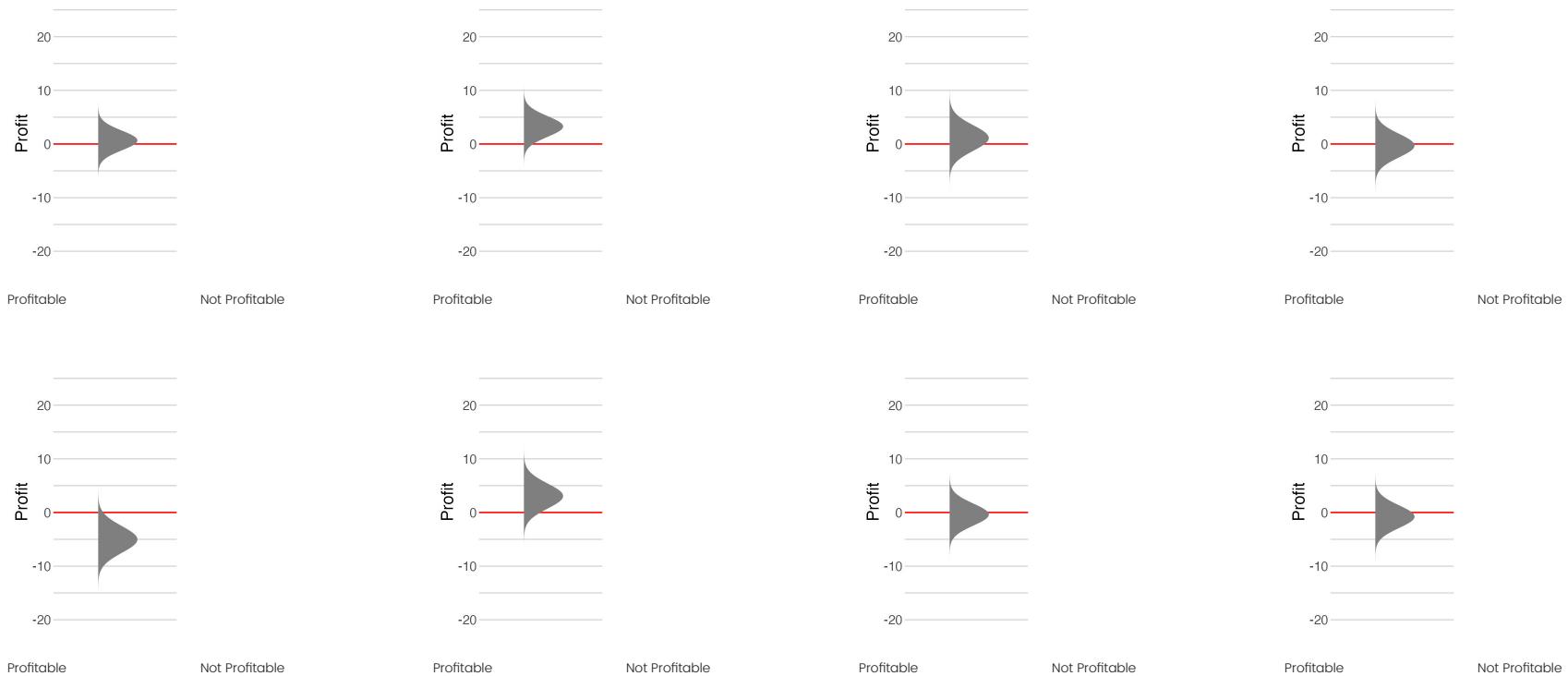
In each trial, the maximum number of points you can earn will be around 100-150.

Training

On the next page, you will be presented with a training trials. You will receive feedback on how you performed on these tasks. There are a total of five training trials. Your points in the training will be reset before the actual task begins.

Trial number: 1/5

Which of the regions are profitable?



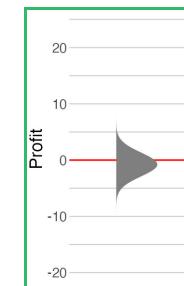
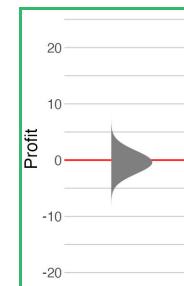
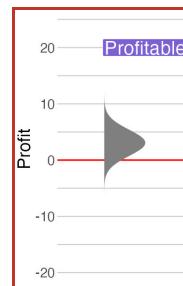
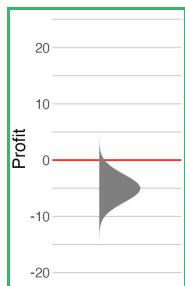
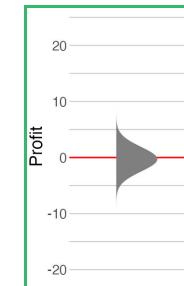
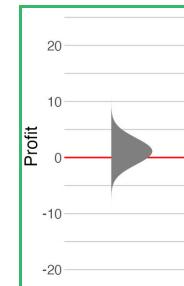
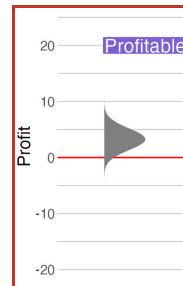
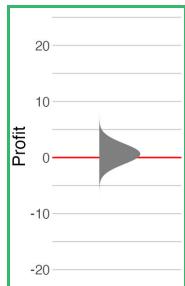
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Region(s) selected in the last trial: None

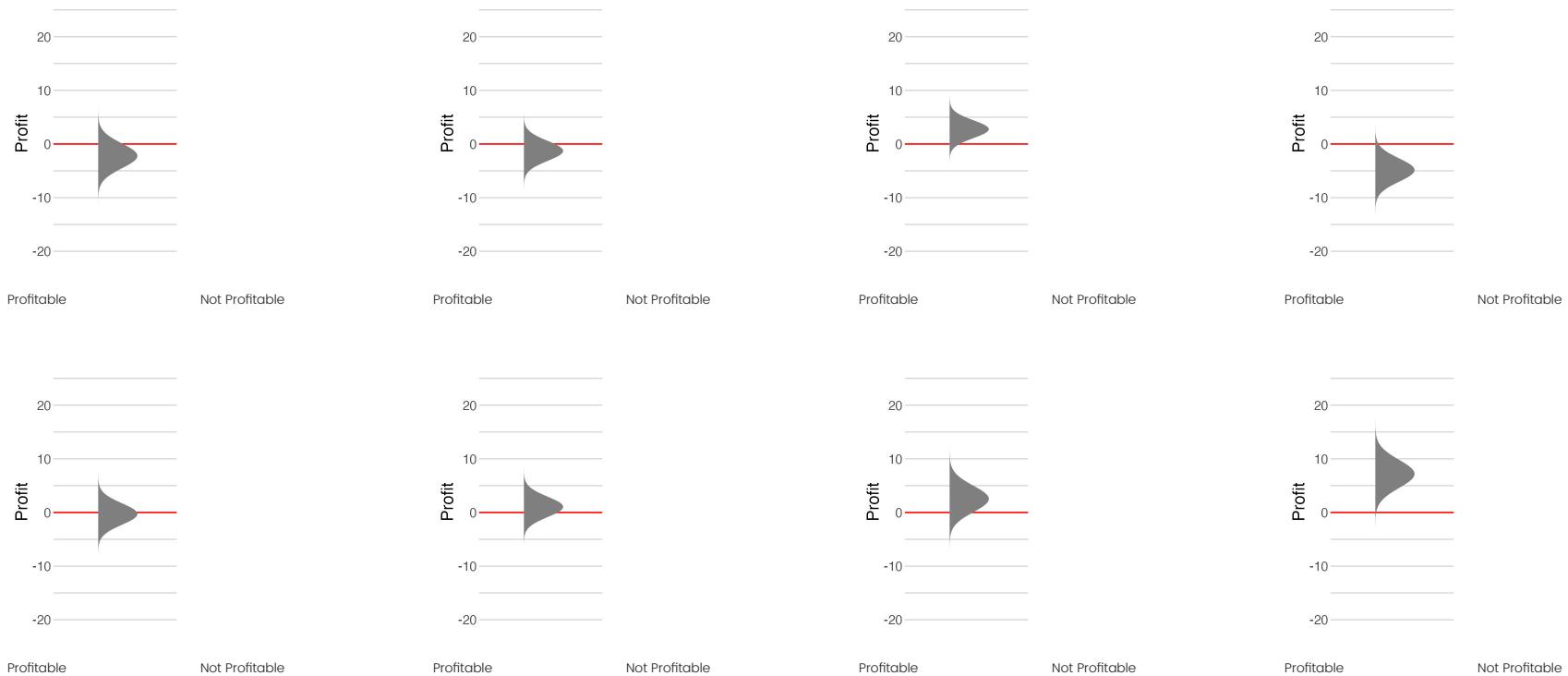
Total Points: -20

Below we indicate which of the regions were actually profitable, as well as which decisions you made **correctly** and **incorrectly**:



Trial number: 2/5

Which of the regions are profitable?



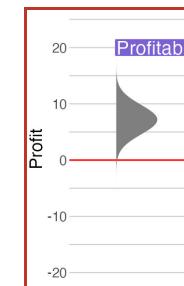
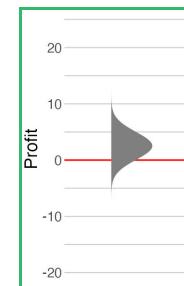
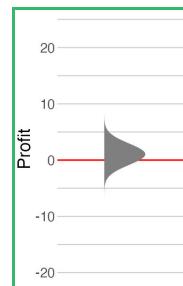
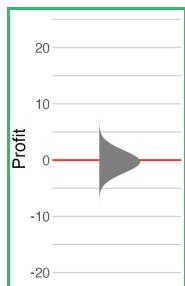
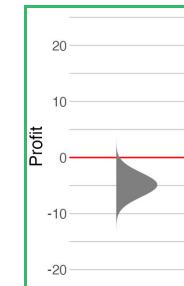
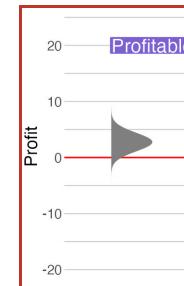
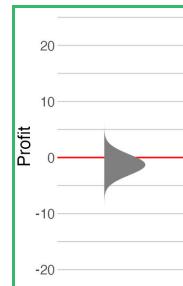
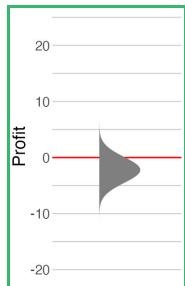
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Region(s) selected in the last trial: None

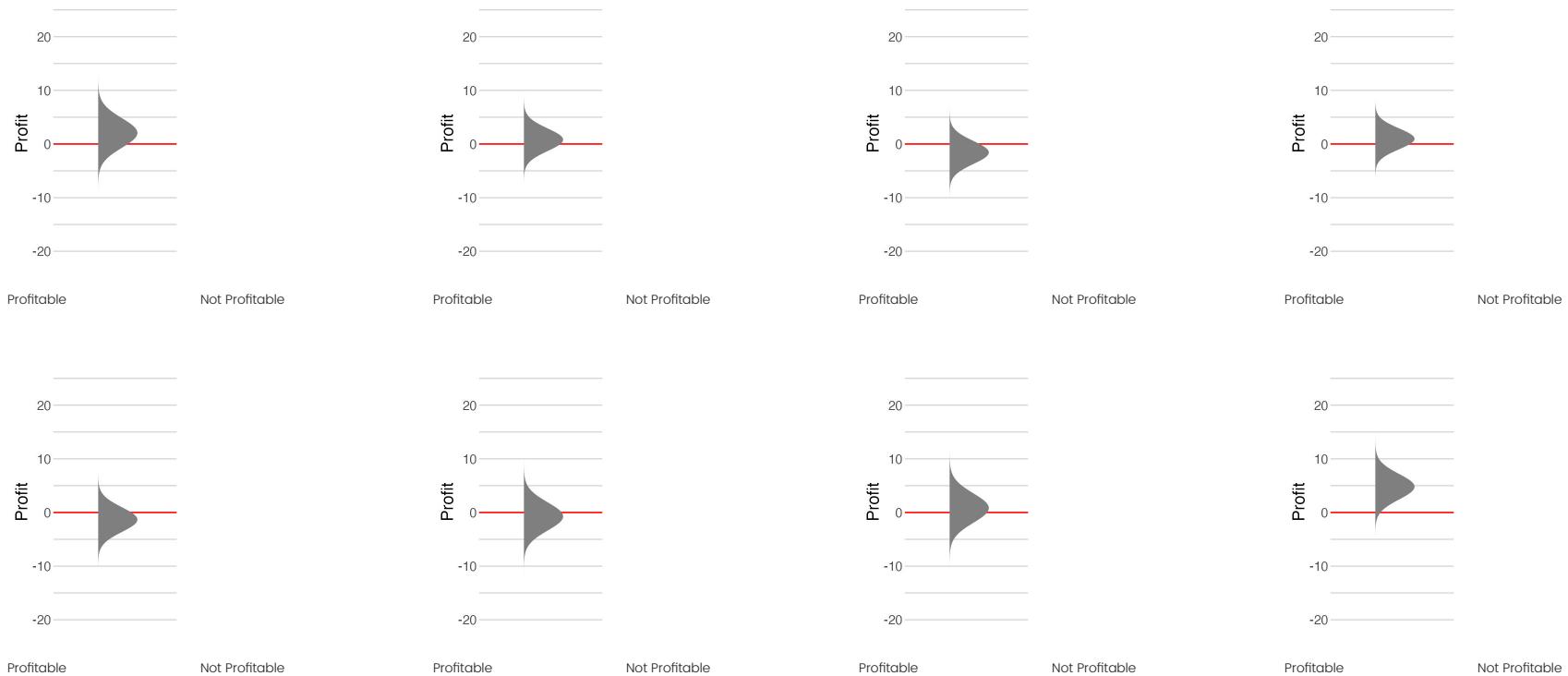
Total Points: ~40

Below we indicate which of the regions were actually profitable, as well as which decisions you made **correctly** and **incorrectly**:



Trial number: 3/5

Which of the regions are profitable?



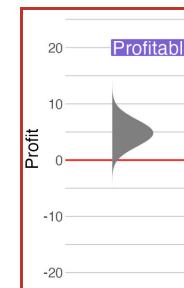
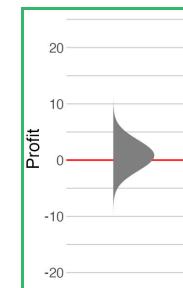
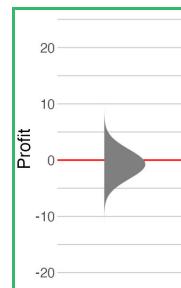
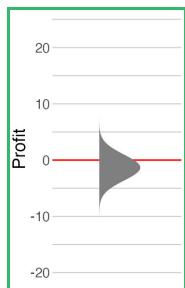
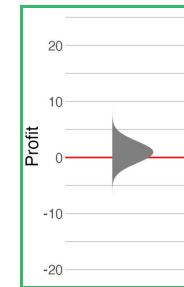
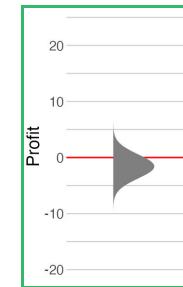
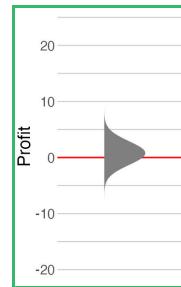
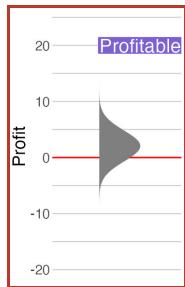
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Region(s) selected in the last trial: None

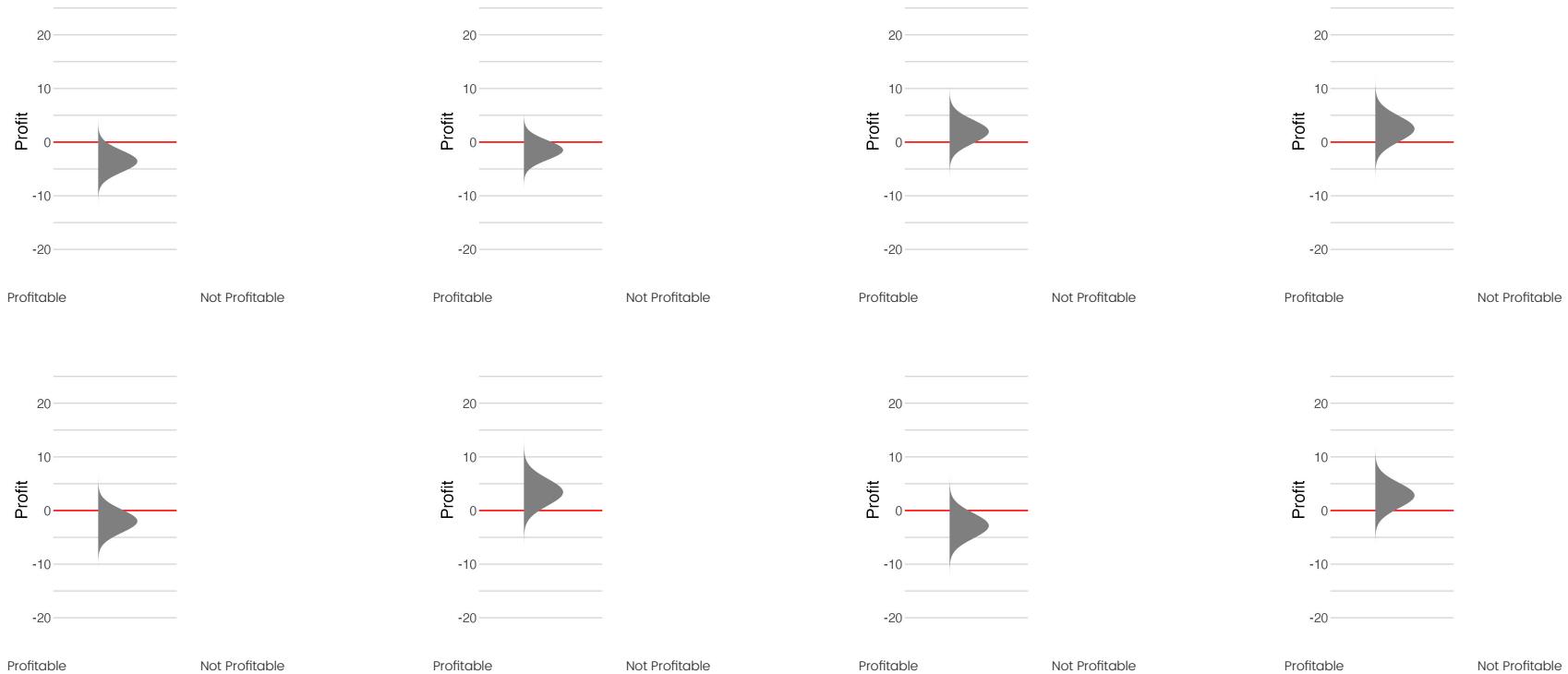
Total Points: -60

Below we indicate which of the regions were actually profitable, as well as which decisions you made **correctly** and **incorrectly**:



Trial number: 4/5

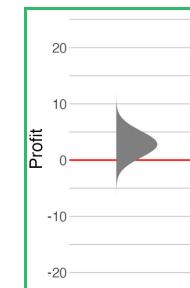
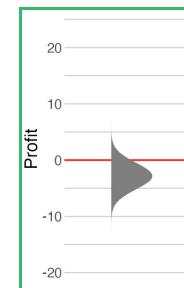
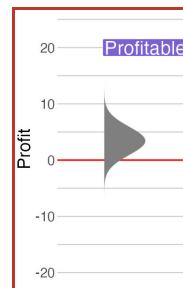
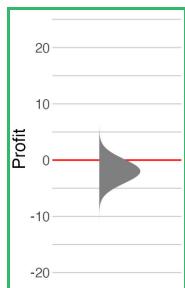
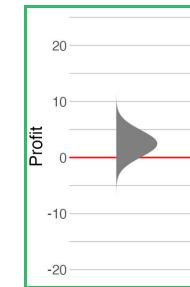
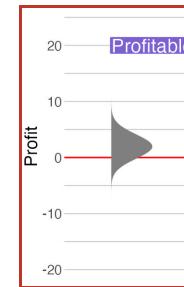
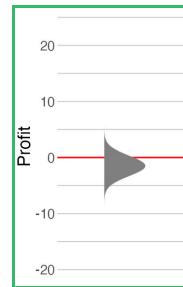
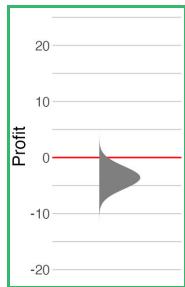
Which of the regions are profitable?



Region(s) selected in the last trial: None

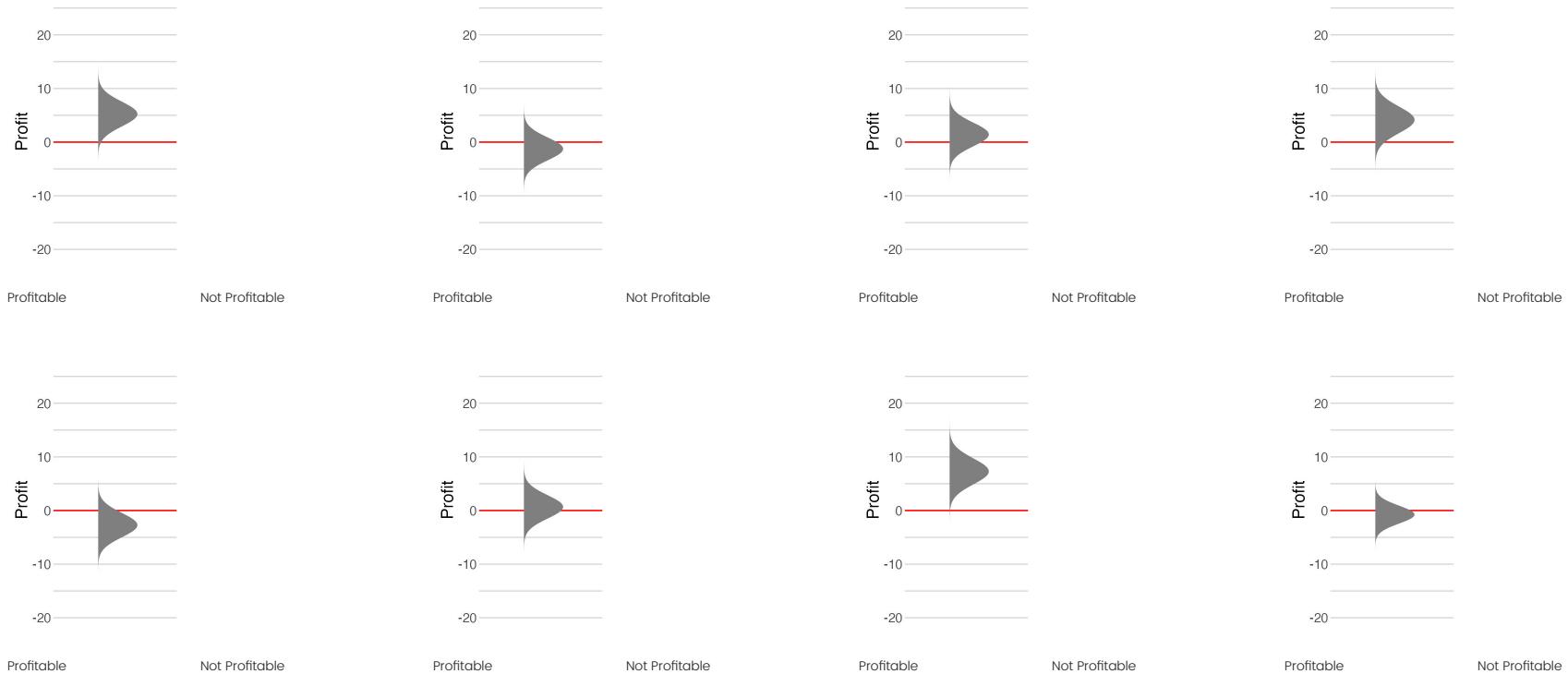
Total Points: ~80

Below we indicate which of the regions were actually profitable, as well as which decisions you made **correctly** and **incorrectly**:



Trial number: 5/5

Which of the regions are profitable?



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Review

You will now be moving on the actual tasks for this study.

In your training, you earned a total of **-100 points**. Don't worry if you did poorly, we will reset your points to zero.

Moreover, please do not worry if you end up with a negative points total at the end of the trial. We will not deduct from your base pay.

On the next page you will be presented with the data for 20 regions (i.e. you will be presented with 20 graphs at the same time).

Recap: how your job performance is evaluated

Your job of picking out profitable regions without full sets of data is risky. You will win or lose corporate brownie points based on the rules below, and of course **your goal is to maximize your points for the next promotion** (and bonus pay).

- If you think a region is profitable on average and **mark it as profitable** it (based on the data from the 20 stores), and that region **does have** an average profit greater than zero based on all 200 stores, you will receive 50 points.
- If you **mark a region as not profitable**, and that region **does not** have a profit greater than zero on average, you will receive 10 points.
- If you **mark a region as profitable**, and that region **does not** have a profit greater than zero, on average, you will lose 150 points.
- If you **mark a region as not profitable**, and that region **does have** a profit greater than zero, on average, you will lose 40 points.

	region profit > 0	region profit < 0
Mark a region as profitable	Win 50 points	Lose 150 points
Mark a region as not profitable	Lose 40 points	Win 10 points

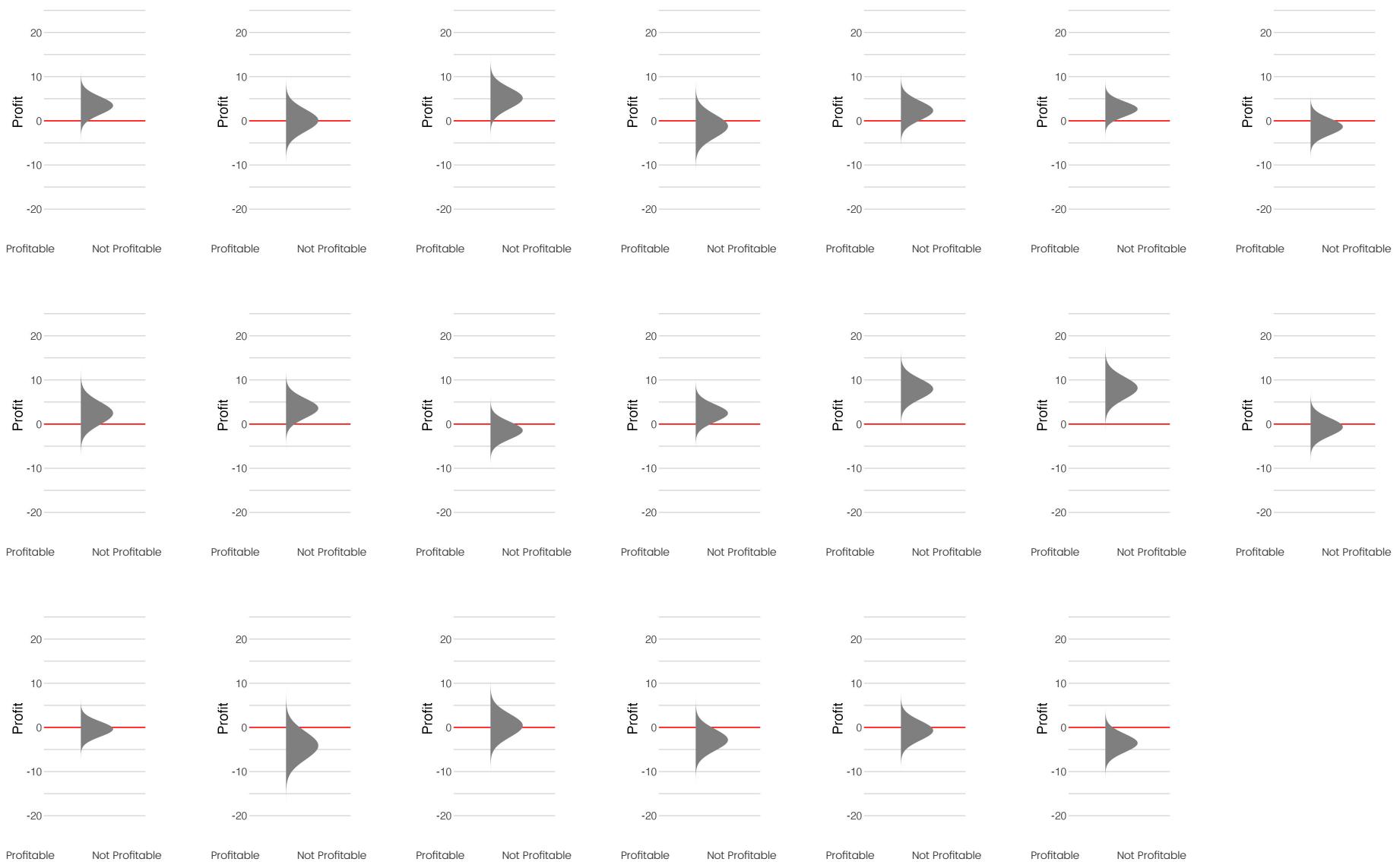
Note:

It is possible that you may end up with negative points. Please do not worry if that is the case. You are still guaranteed the minimum of \$5 for your participation.

Trial number: 1/10

Which of the regions are profitable?

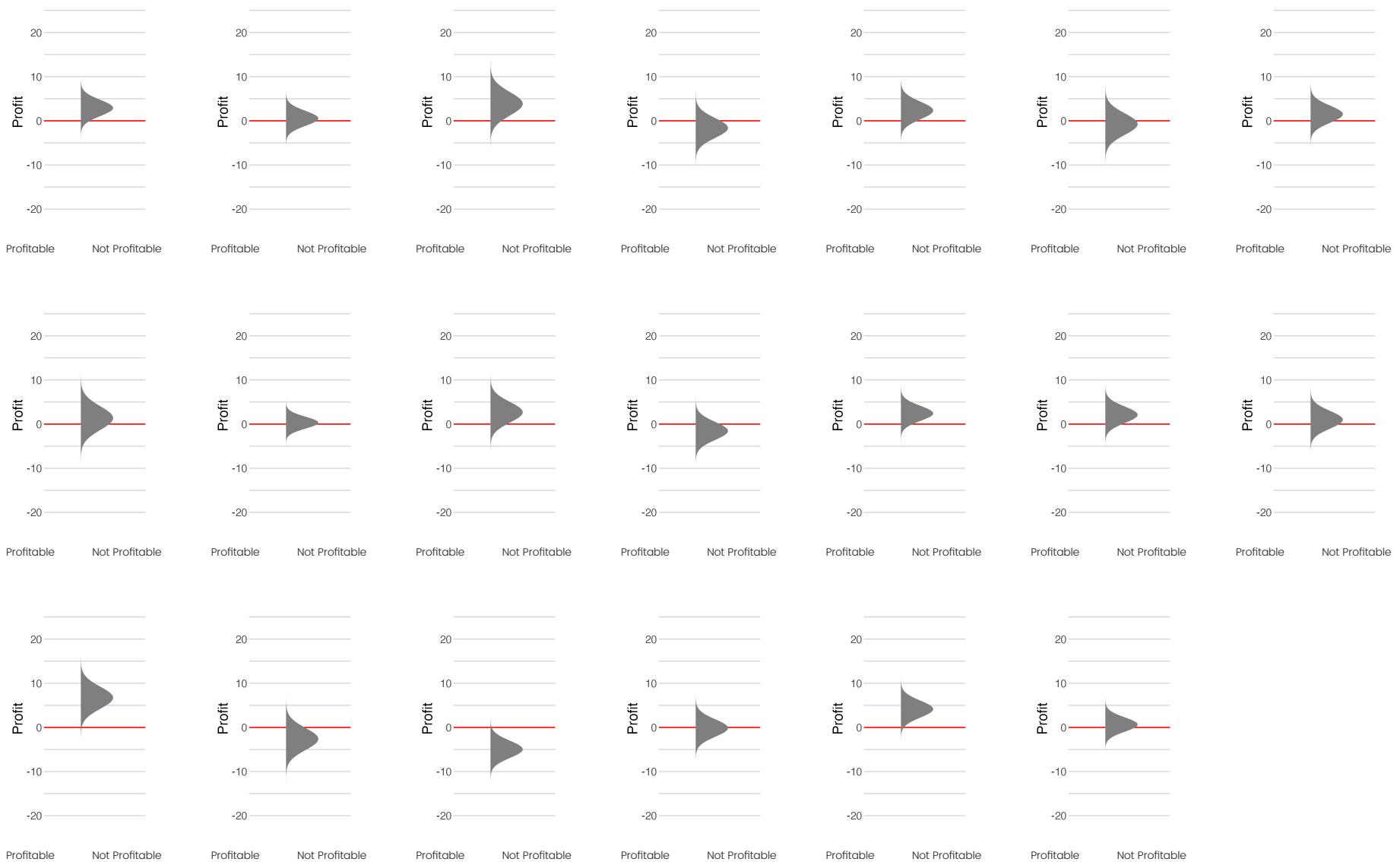
Region(s) selected in the last trial: undefined; Total Points: 0



Trial number: 2/10

Which of the regions are profitable?

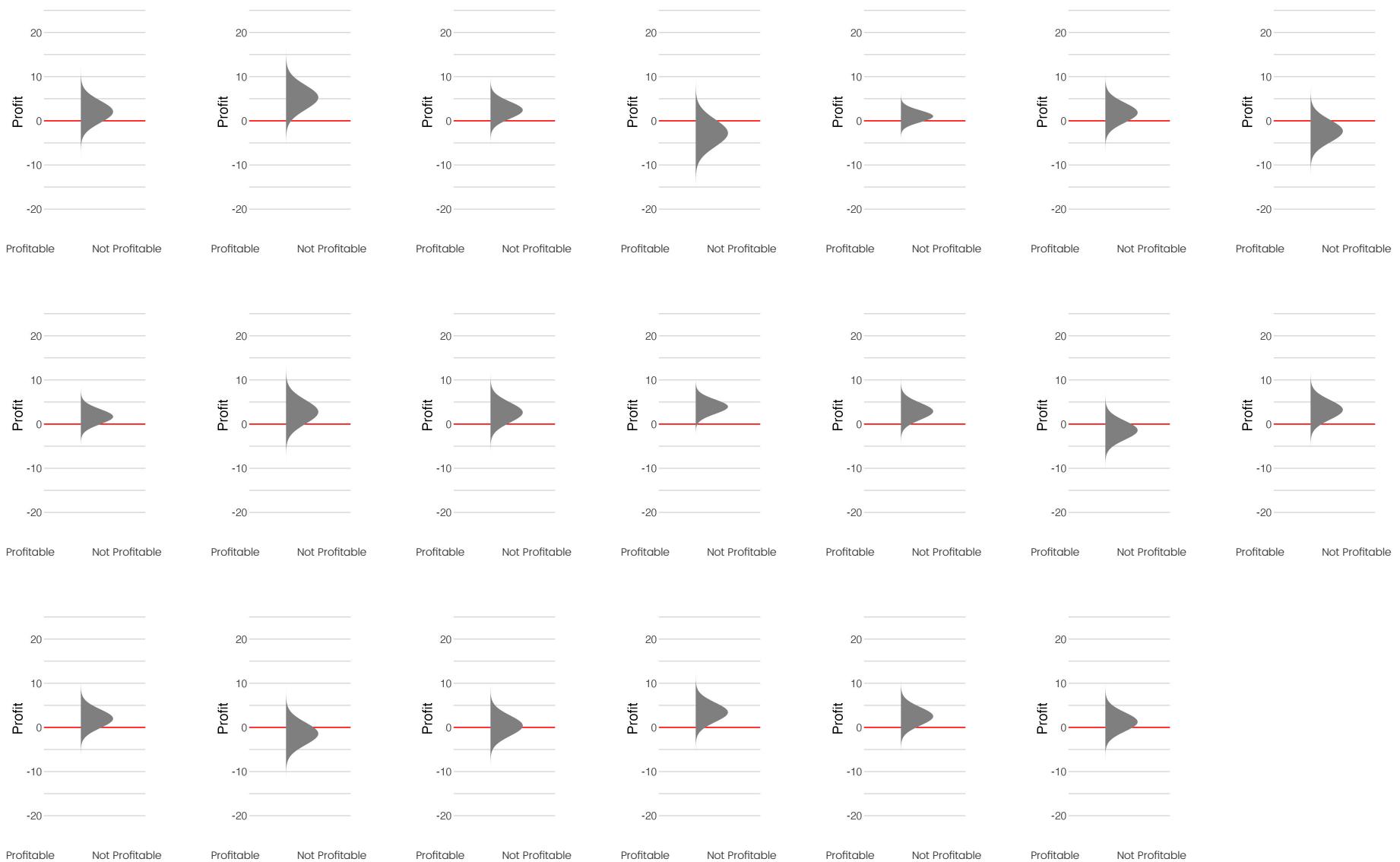
Region(s) selected in the last trial: None; Total Points: -100



Trial number: 3/10

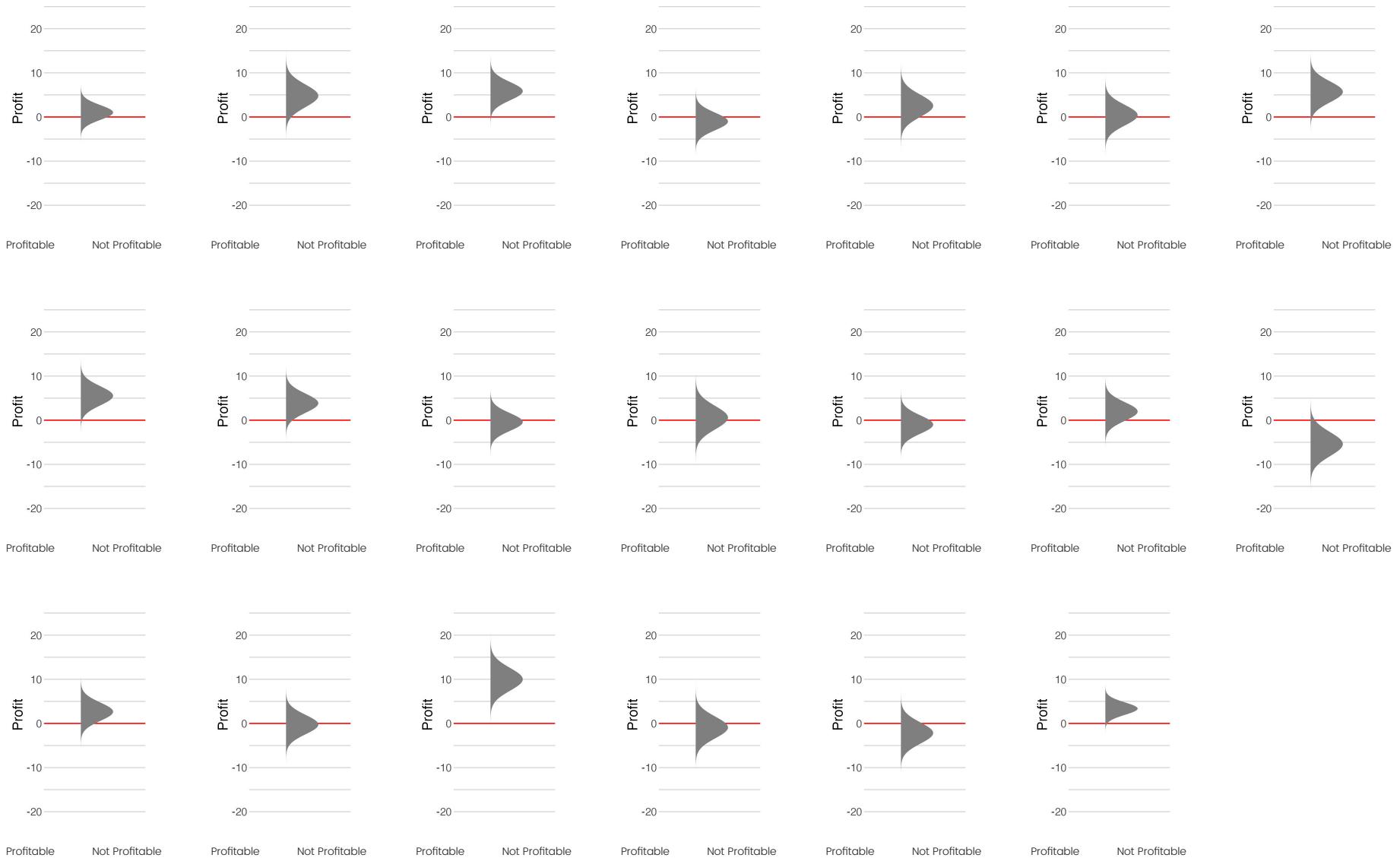
Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -200



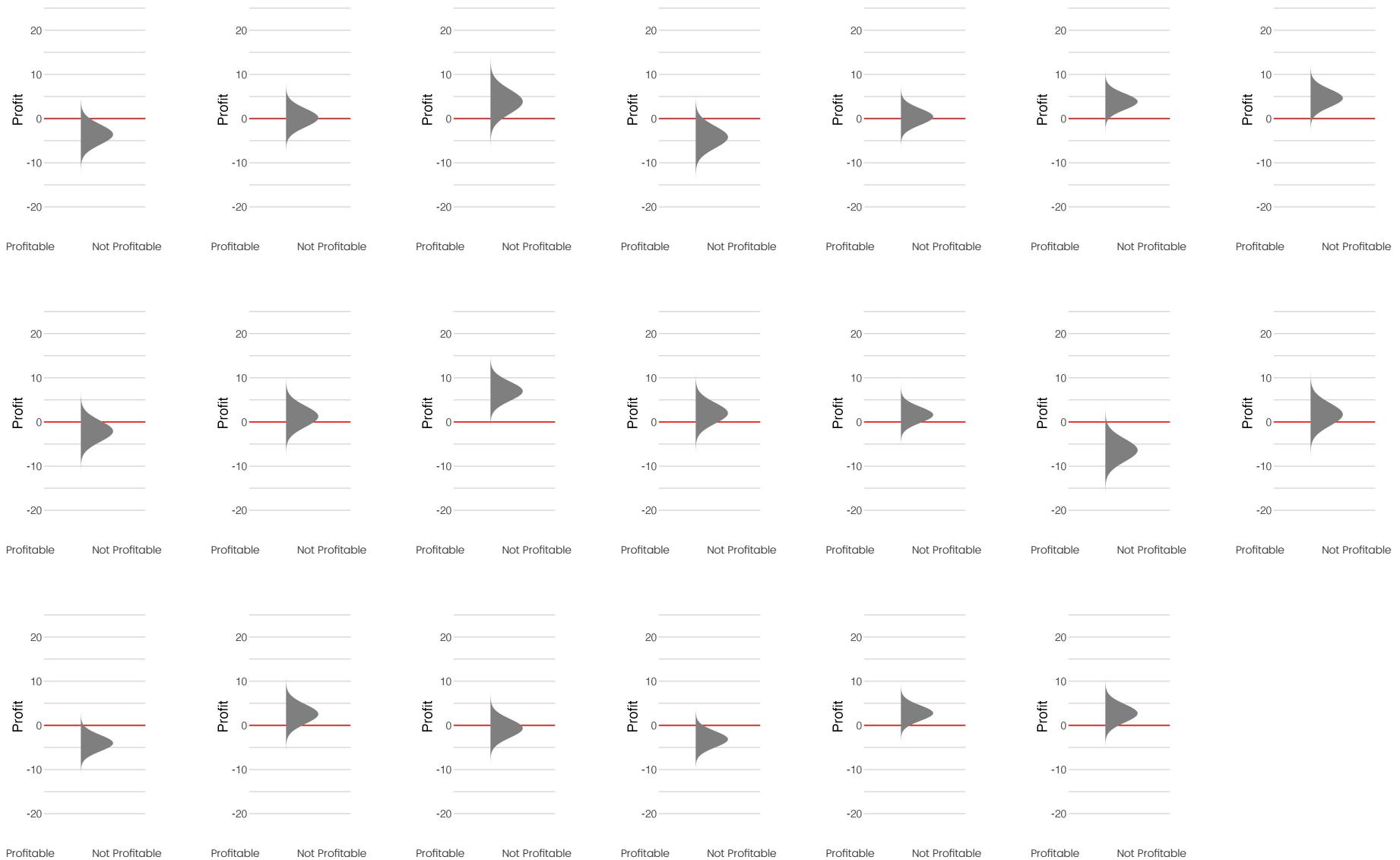
Which of the regions are profitable:

Region(s) selected in the last trial: None; Total Points: -300



Which of the regions are profitable:

Region(s) selected in the last trial: None; Total Points: -400

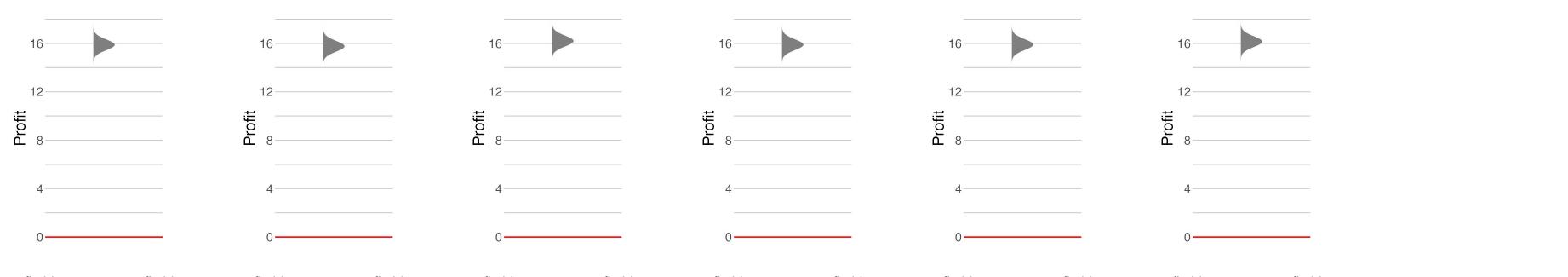
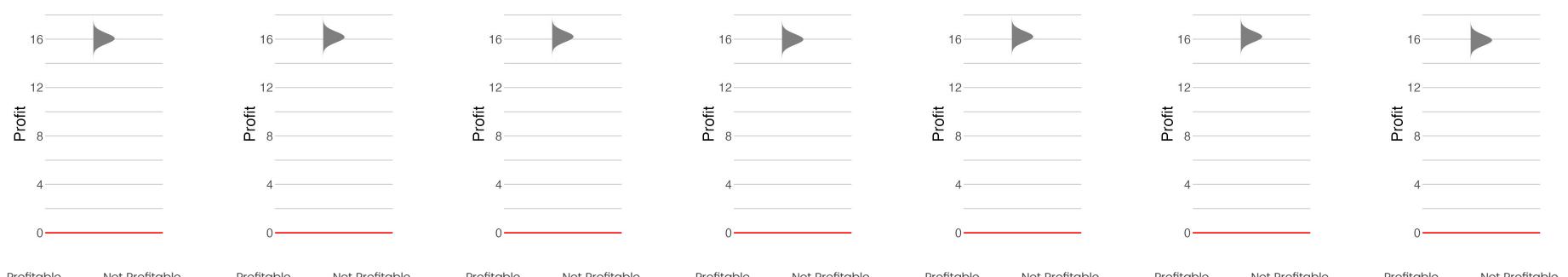
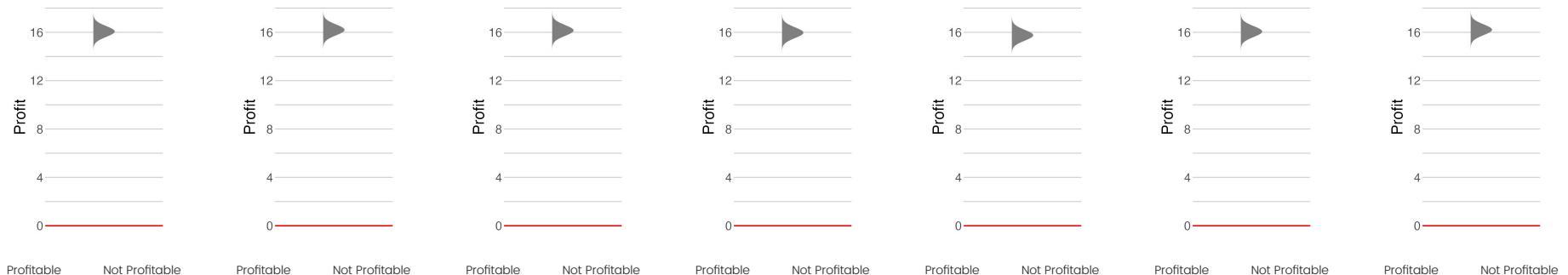


Trial number: 5/10

Which of the regions are profitable?

Mark all regions as profitable

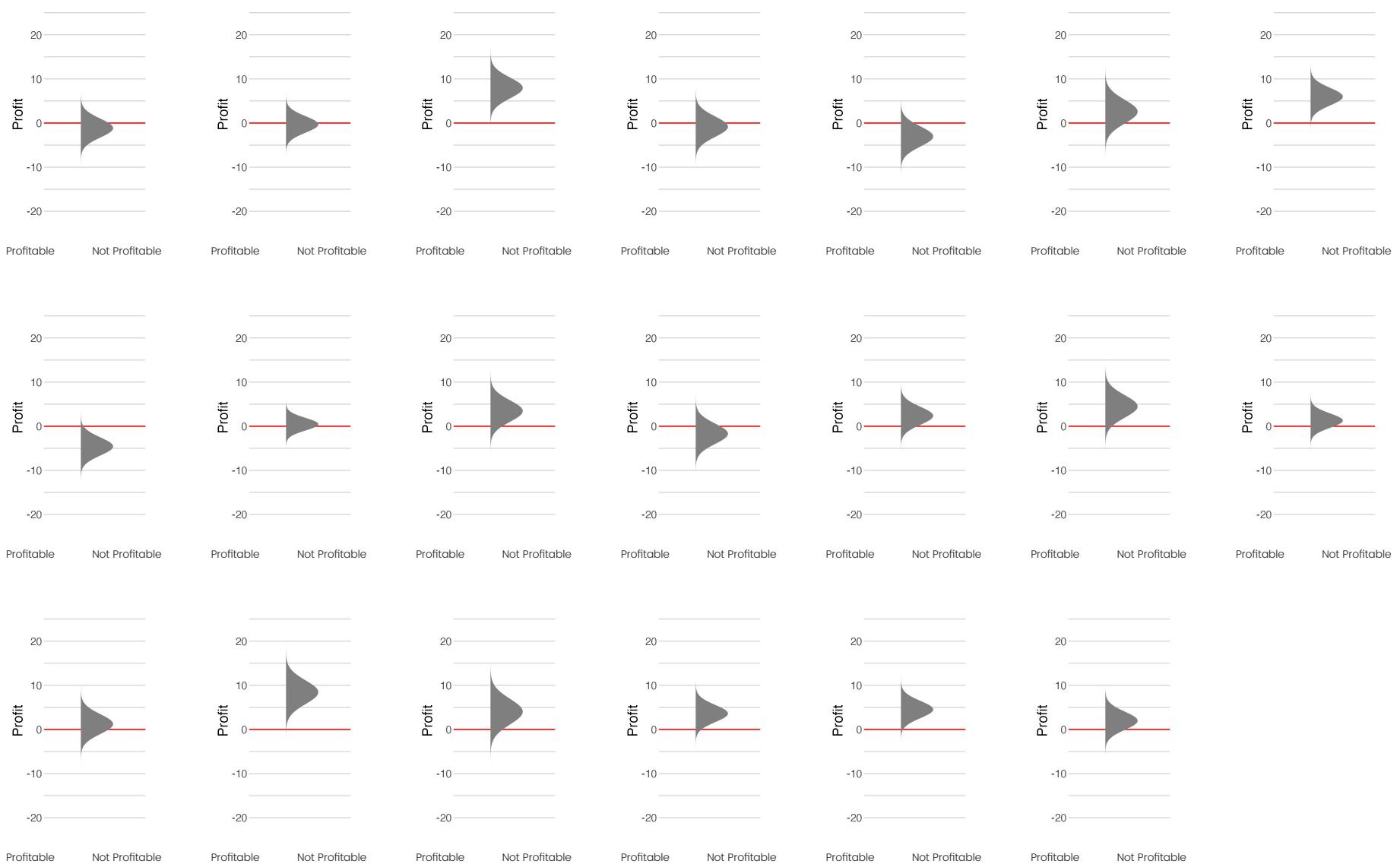
Region(s) selected in the last trial: None; Total Points: -500



Trial number: 6/10

Which of the regions are profitable?

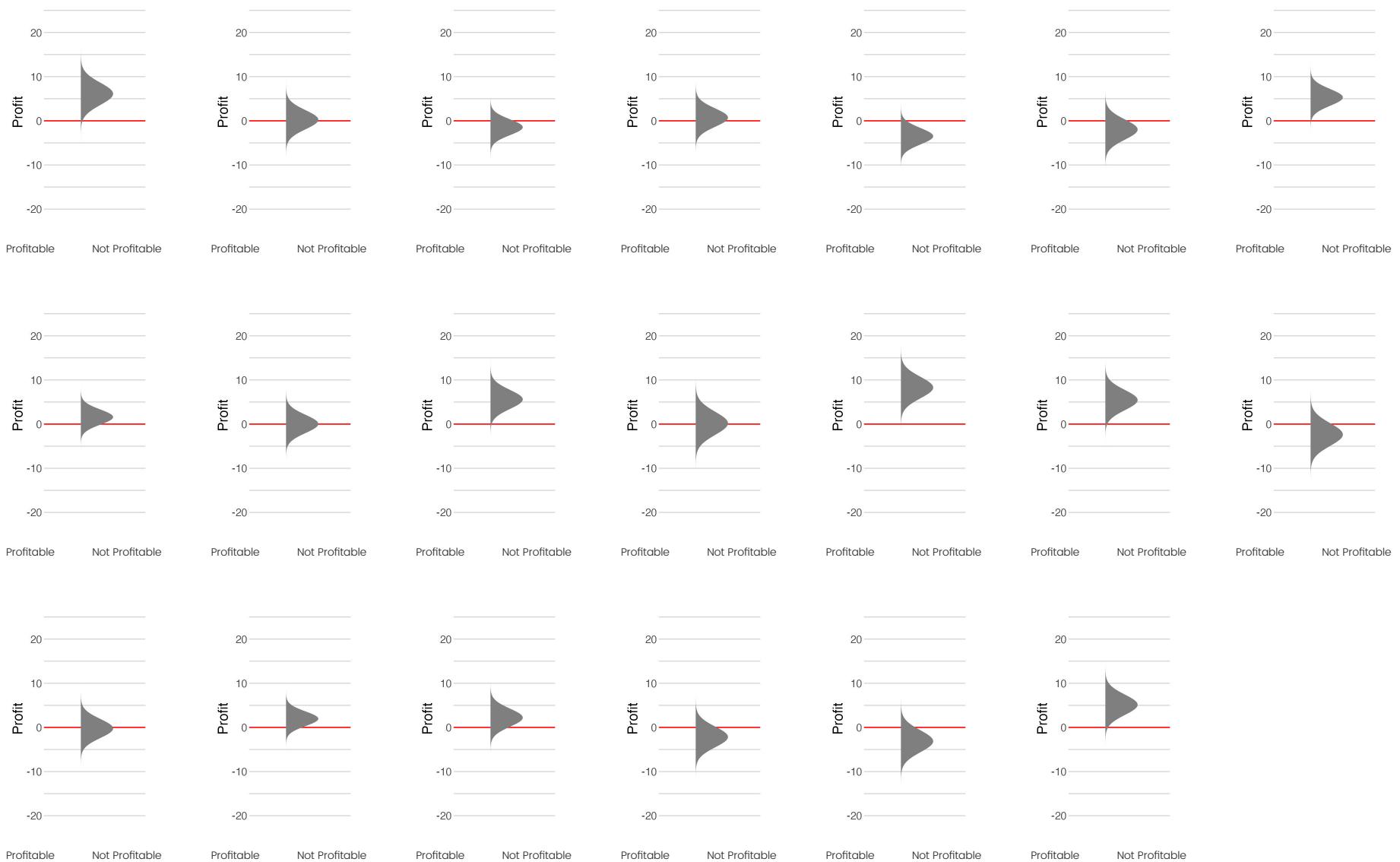
Region(s) selected in the last trial: I,2,3,4,5,6,7,8,9,I0,I1,I2,I3,I4,I5,I6,I7,I8,I9,I20; Total Points: -500



Trial number: 7/10

Which of the regions are profitable?

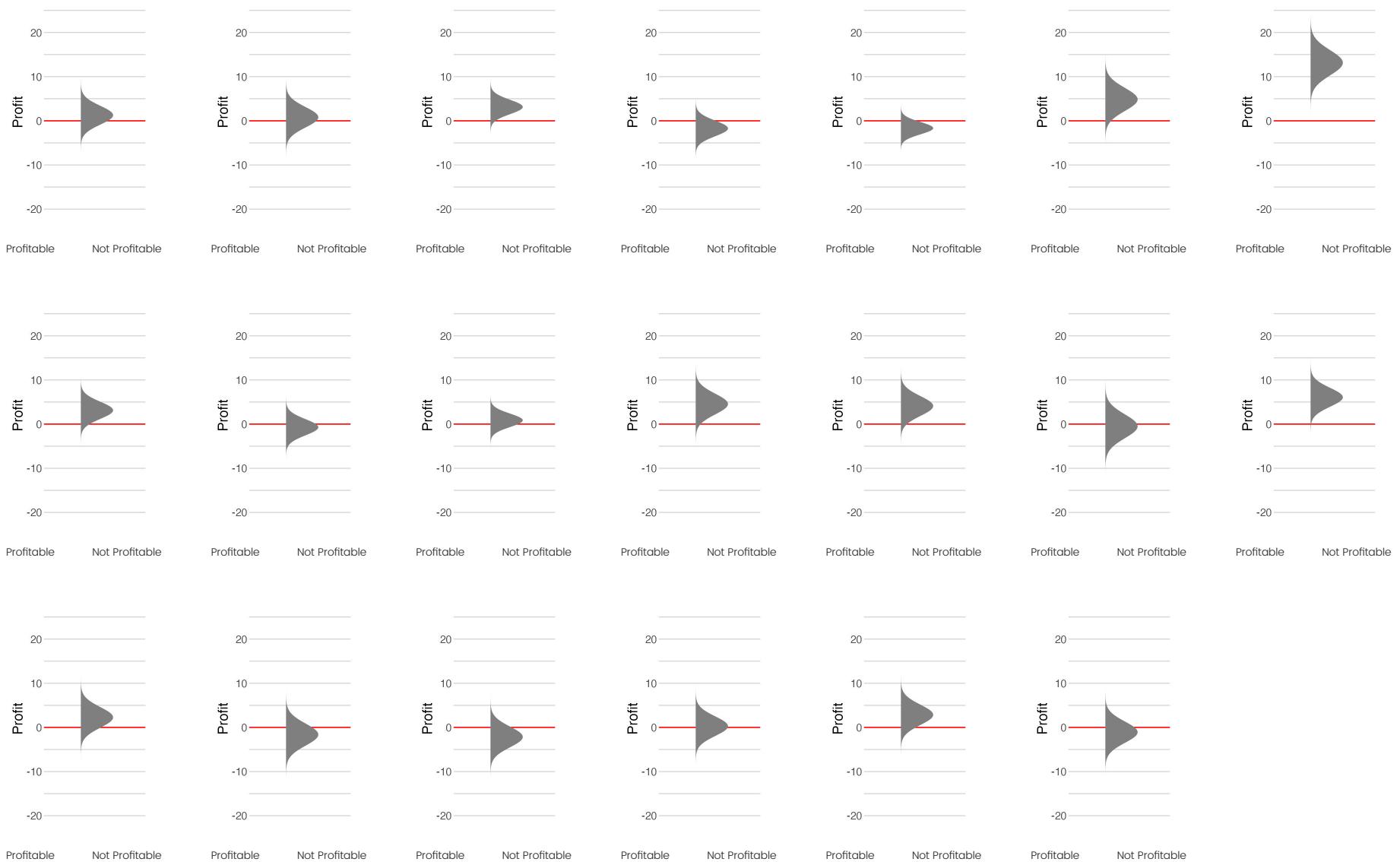
Region(s) selected in the last trial: None; Total Points: -600



Trial number: 8/10

Which of the regions are profitable?

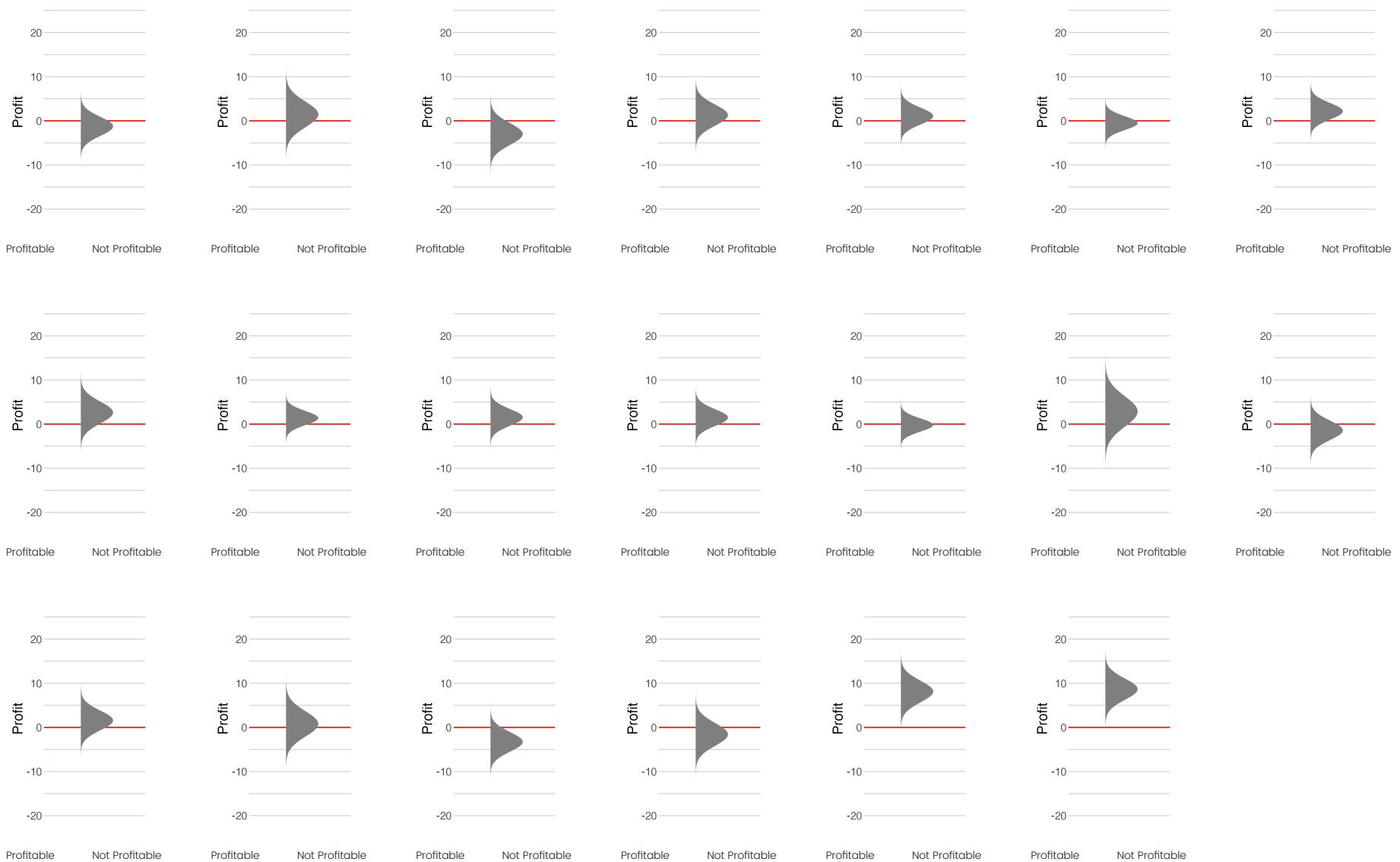
Region(s) selected in the last trial: None; Total Points: -700



Trial number: 9/10

Which of the regions are profitable?

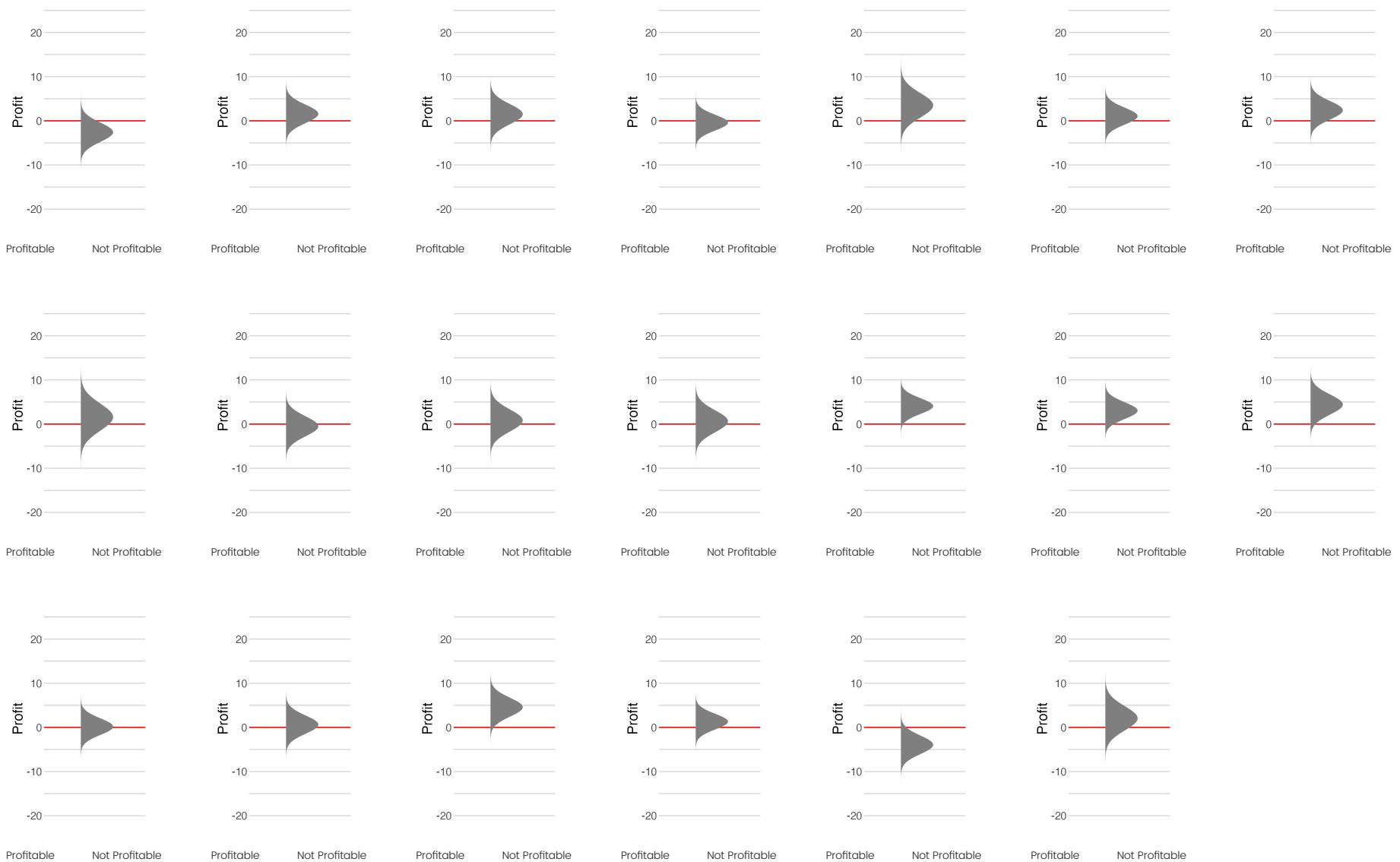
Region(s) selected in the last trial: None; Total Points: -800



Trial number: 10/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -900



Region(s) selected in the last trial: None; Total Points: -1000

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On the next page you will be presented with the data for 16 regions (i.e. you will be presented with 16 graphs at the same time).

Recap: how your job performance is evaluated

Your job of picking out profitable regions without full sets of data is risky. You will win or lose corporate brownie points based on the rules below, and of course **your goal is to maximize your points for the next promotion** (and bonus pay).

- If you think a region is profitable on average and **mark it as profitable** it (based on the data from the 20 stores), and that region **does have** an average profit greater than zero based on all 200 stores, you will receive 50 points.
- If you **mark a region as not profitable**, and that region **does not** have a profit greater than zero on average, you will receive 10 points.
- If you **mark a region as profitable**, and that region **does not** have a profit greater than zero, on average, you will lose 150 points.
- If you **mark a region as not profitable**, and that region **does have** a profit greater than zero, on average, you will lose 40 points.

	region profit > 0	region profit < 0
Mark a region as profitable	Win 50 points	Lose 150 points
Mark a region as not profitable	Lose 40 points	Win 10 points

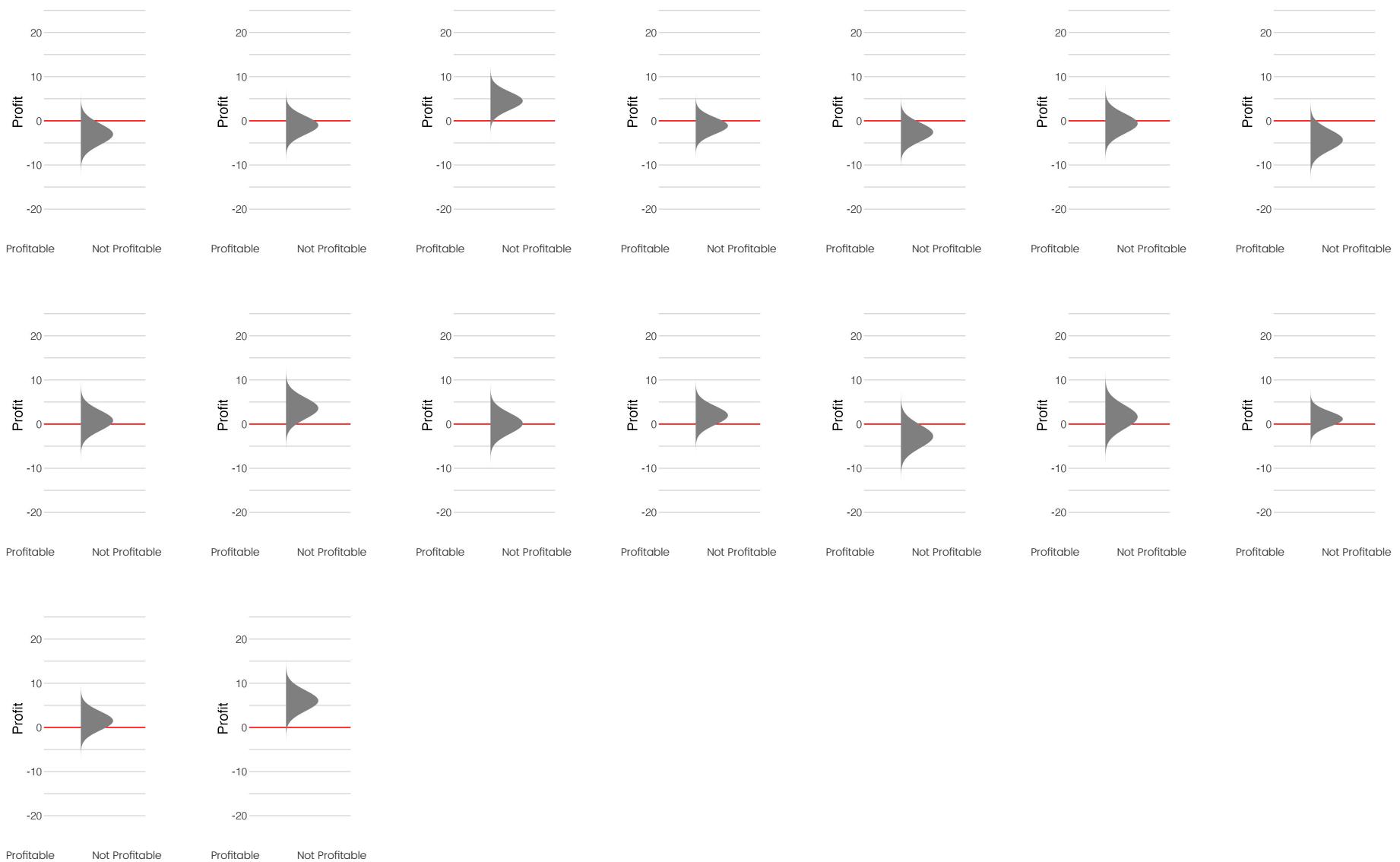
Note:

It is possible that you may end up with negative points. Please do not worry if that is the case. You are still guaranteed the minimum of \$5 for your participation.

Trial number: 1/10

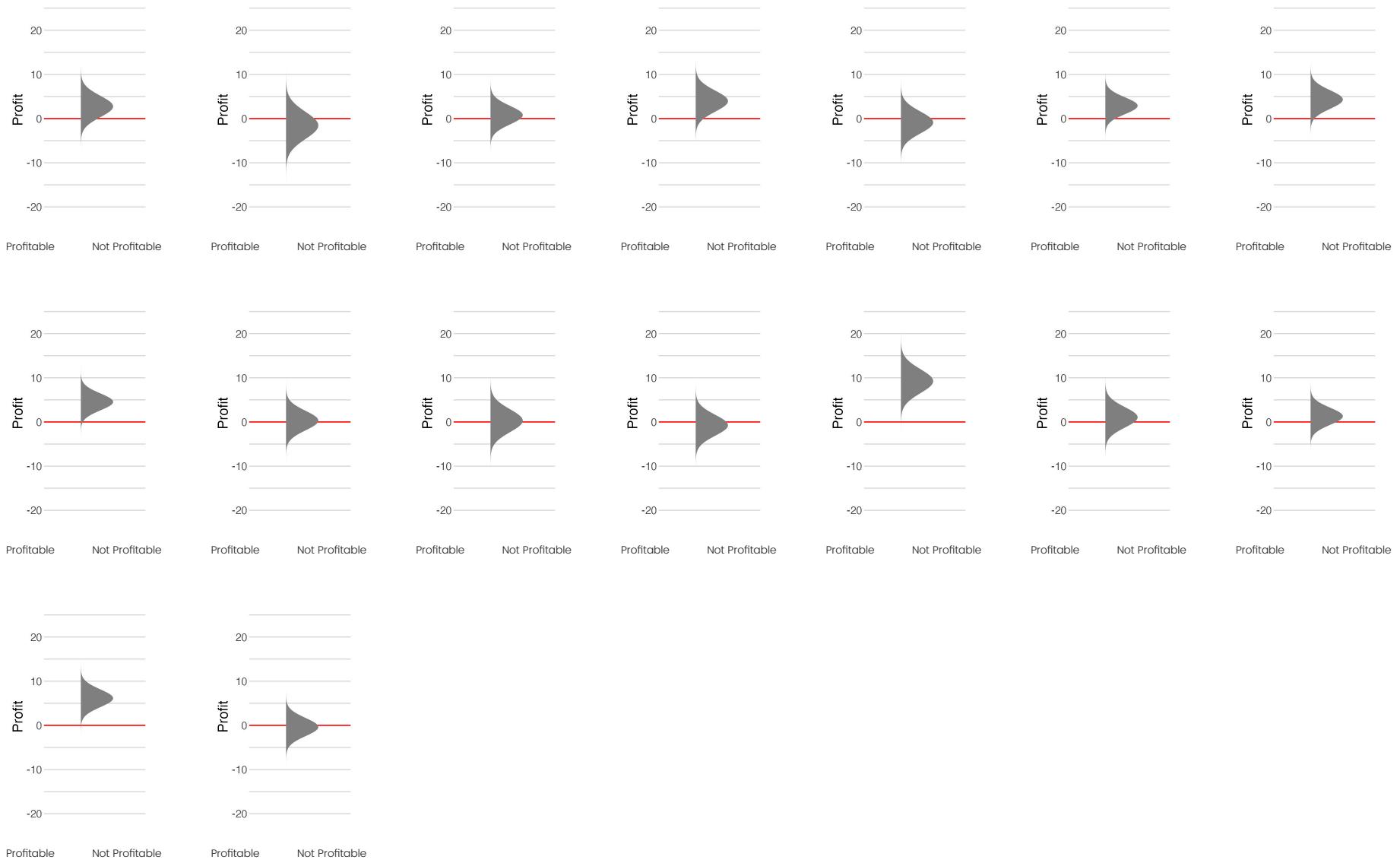
Which of the regions are profitable?

Region(s) selected in the last trial: undefined; Total Points: -1000



Which of the regions are profitable?

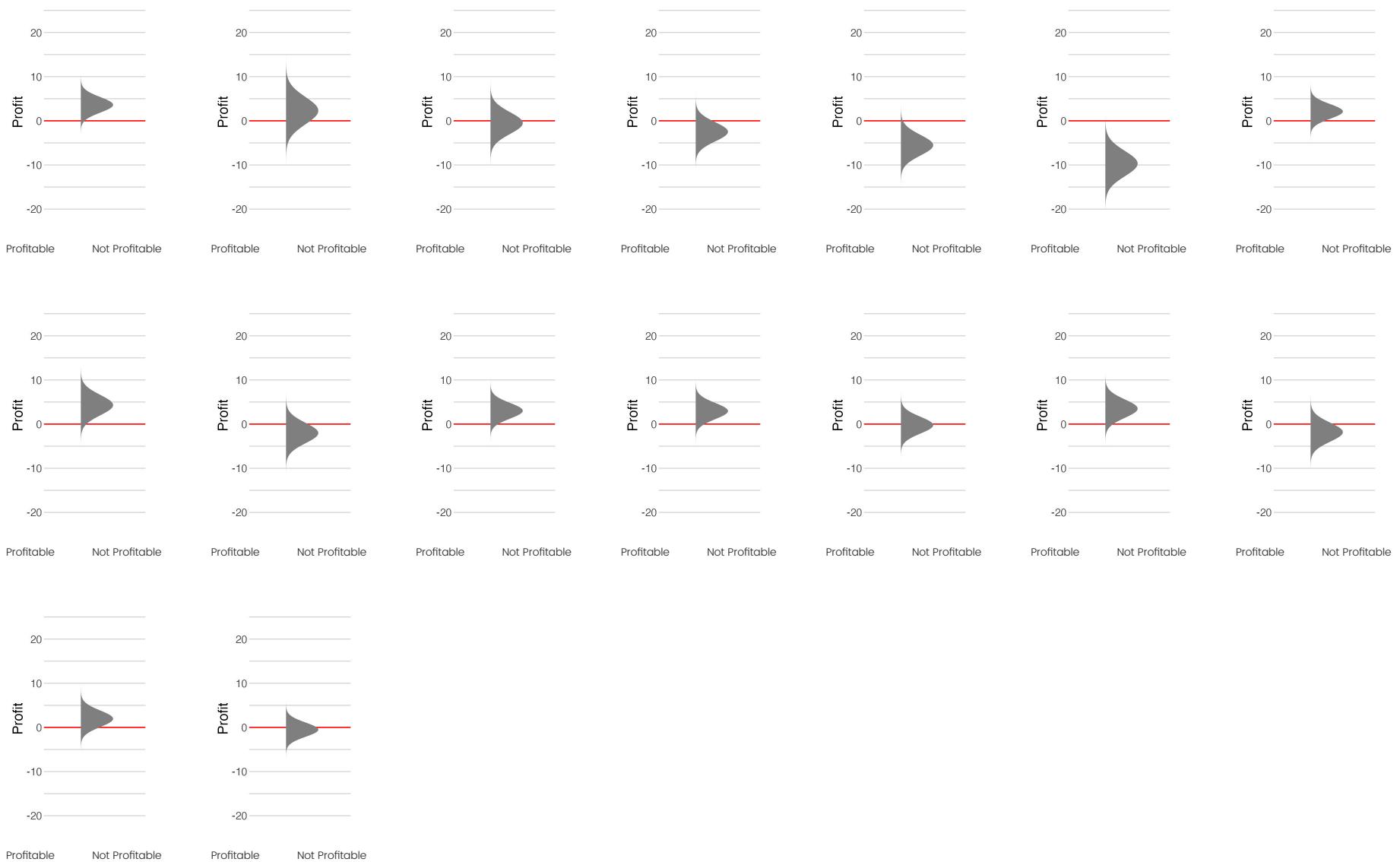
Region(s) selected in the last trial: None; Total Points: -1090



Trial number: 3/10

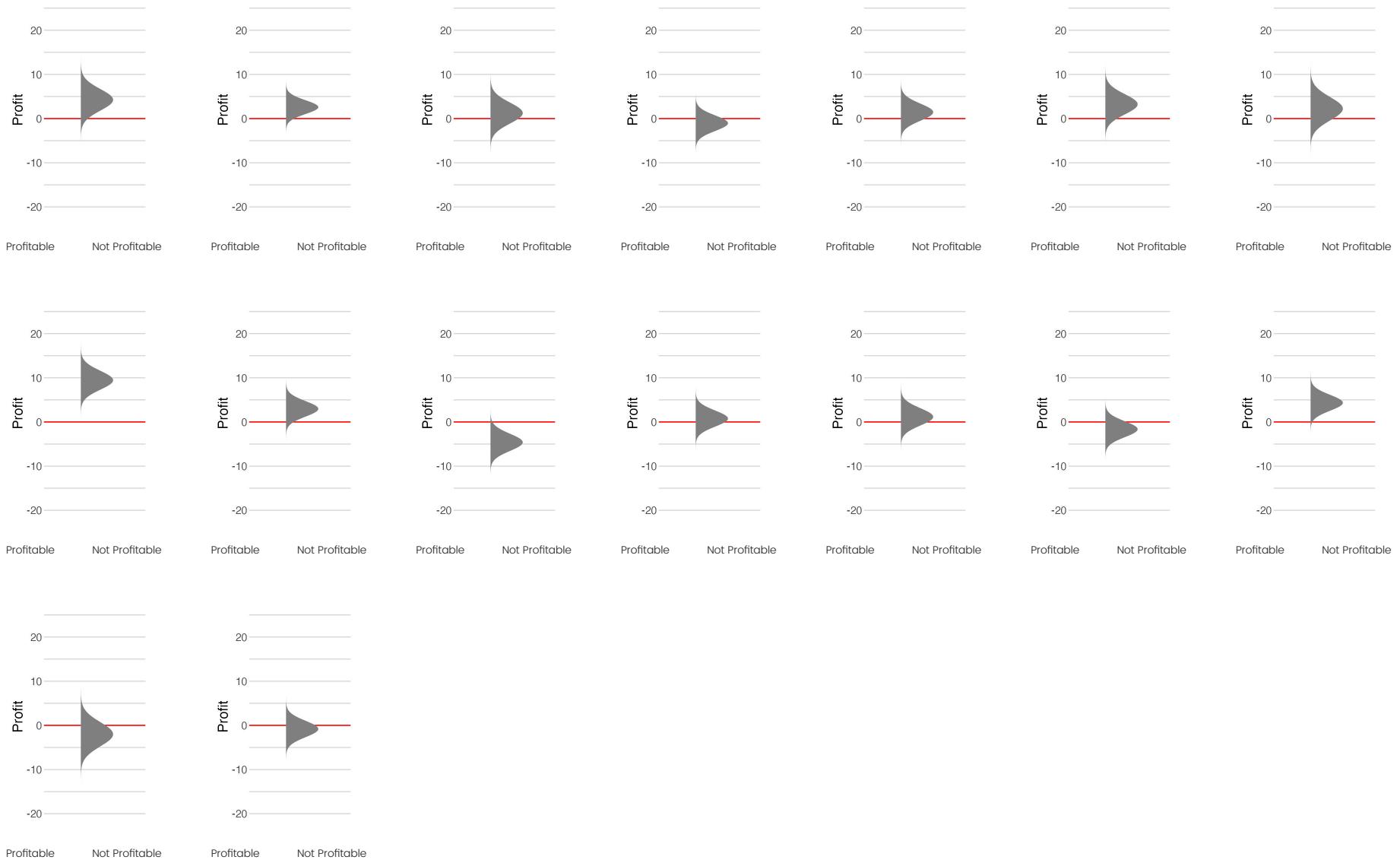
Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -1180



Which of the regions are profitable?

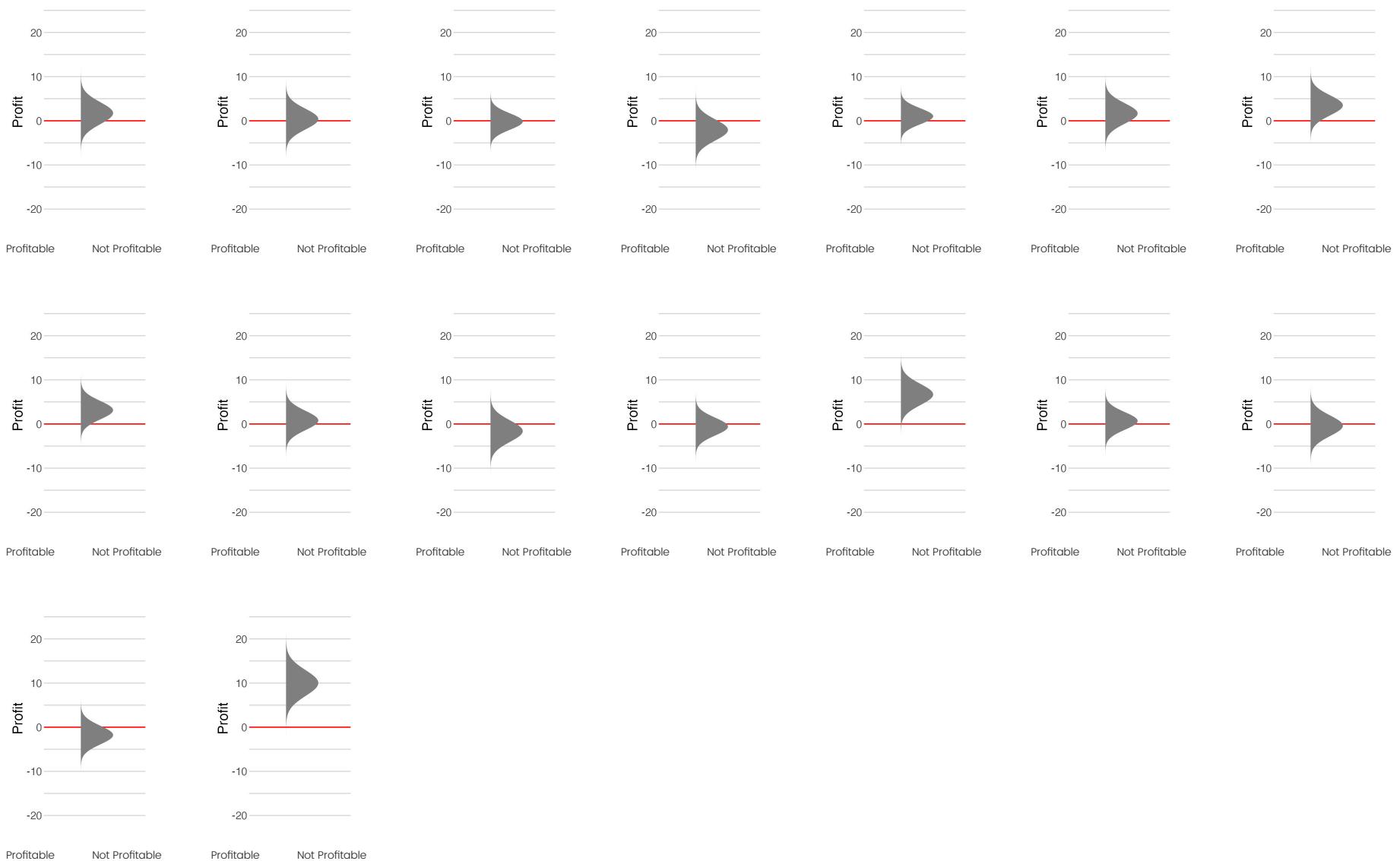
Region(s) selected in the last trial: None; Total Points: -1270



Trial number: 5/10

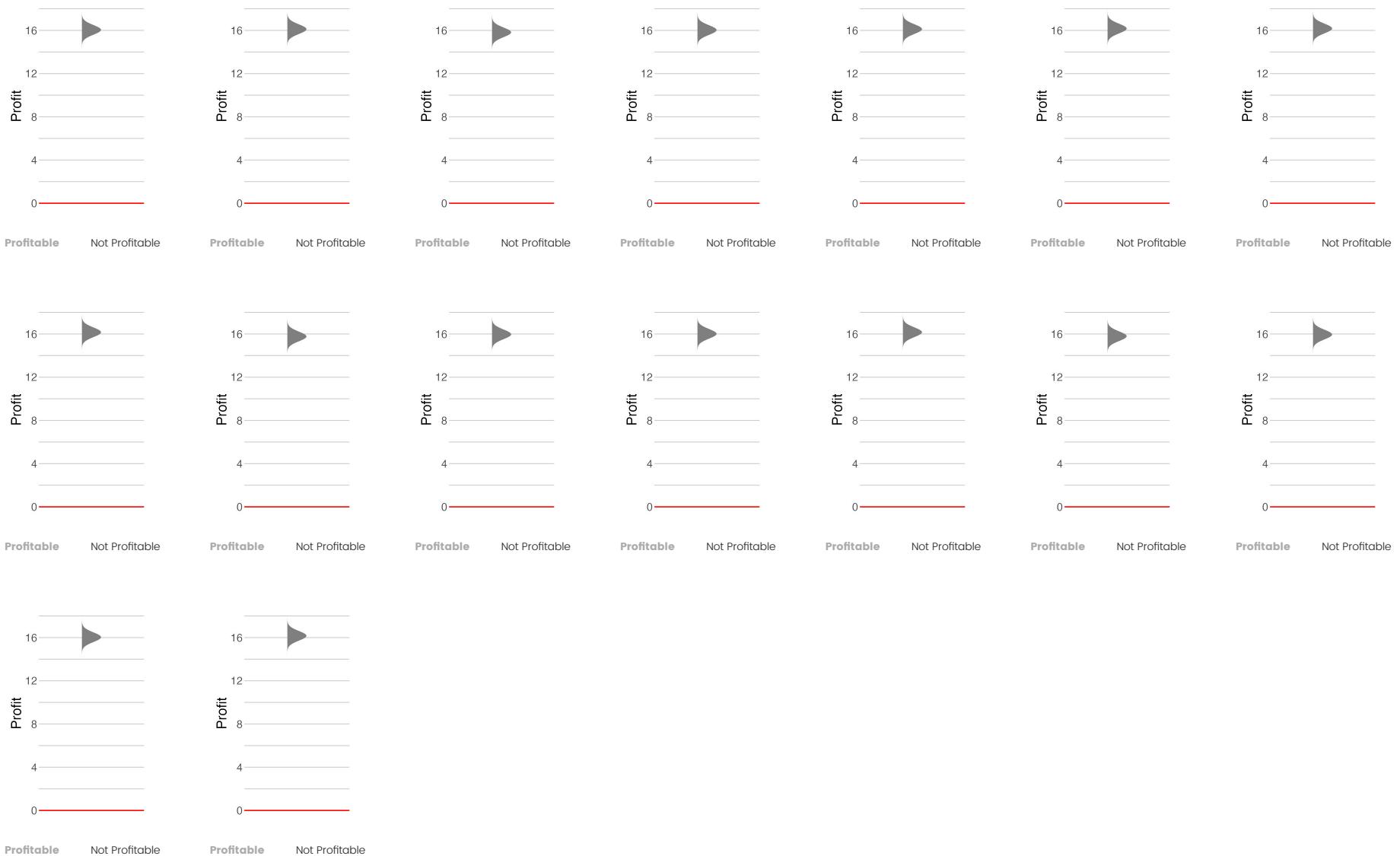
Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -1360



Mark one region as profitable

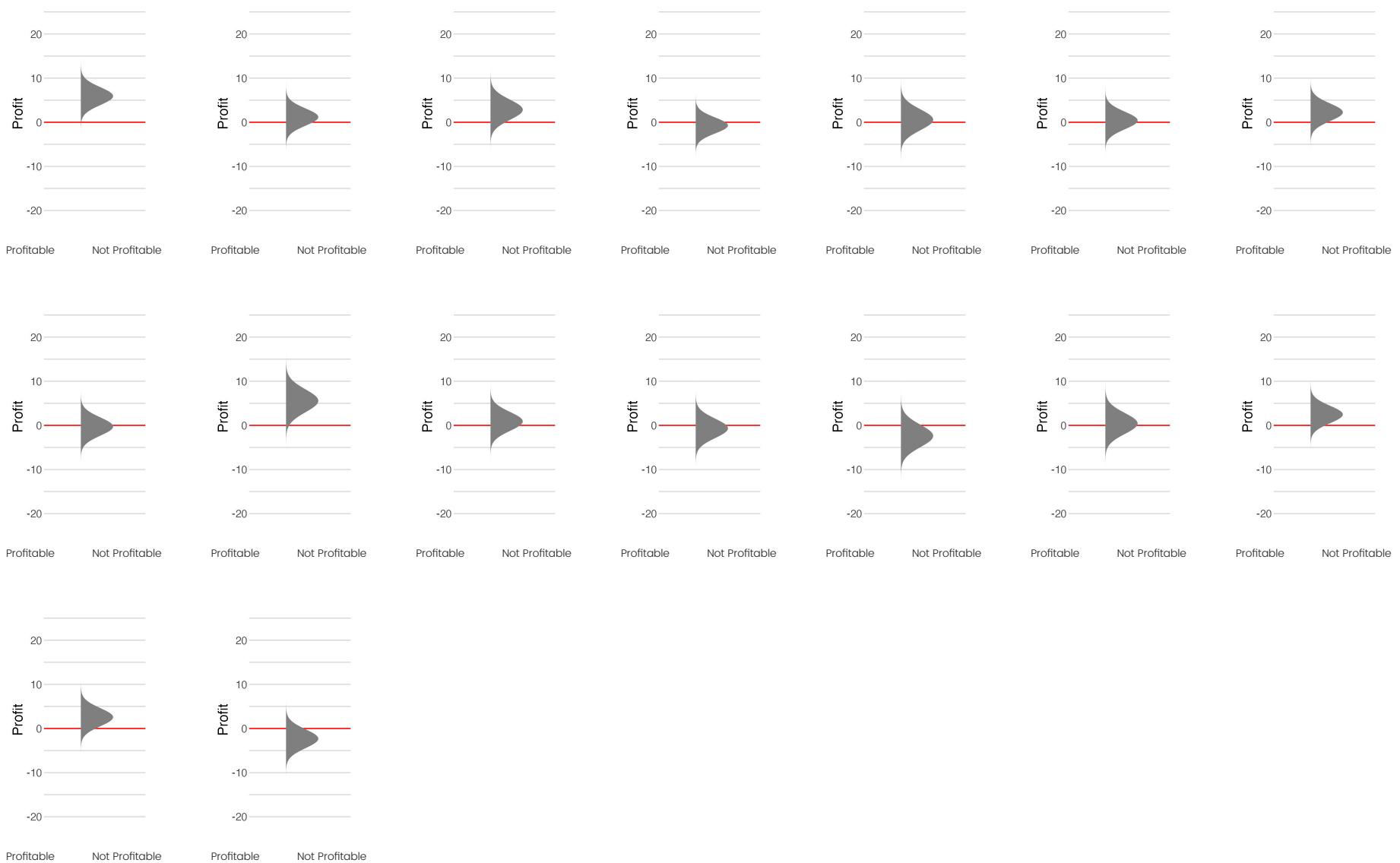
Region(s) selected in the last trial: None; Total Points: -1450



Trial number: 6/10

Which of the regions are profitable?

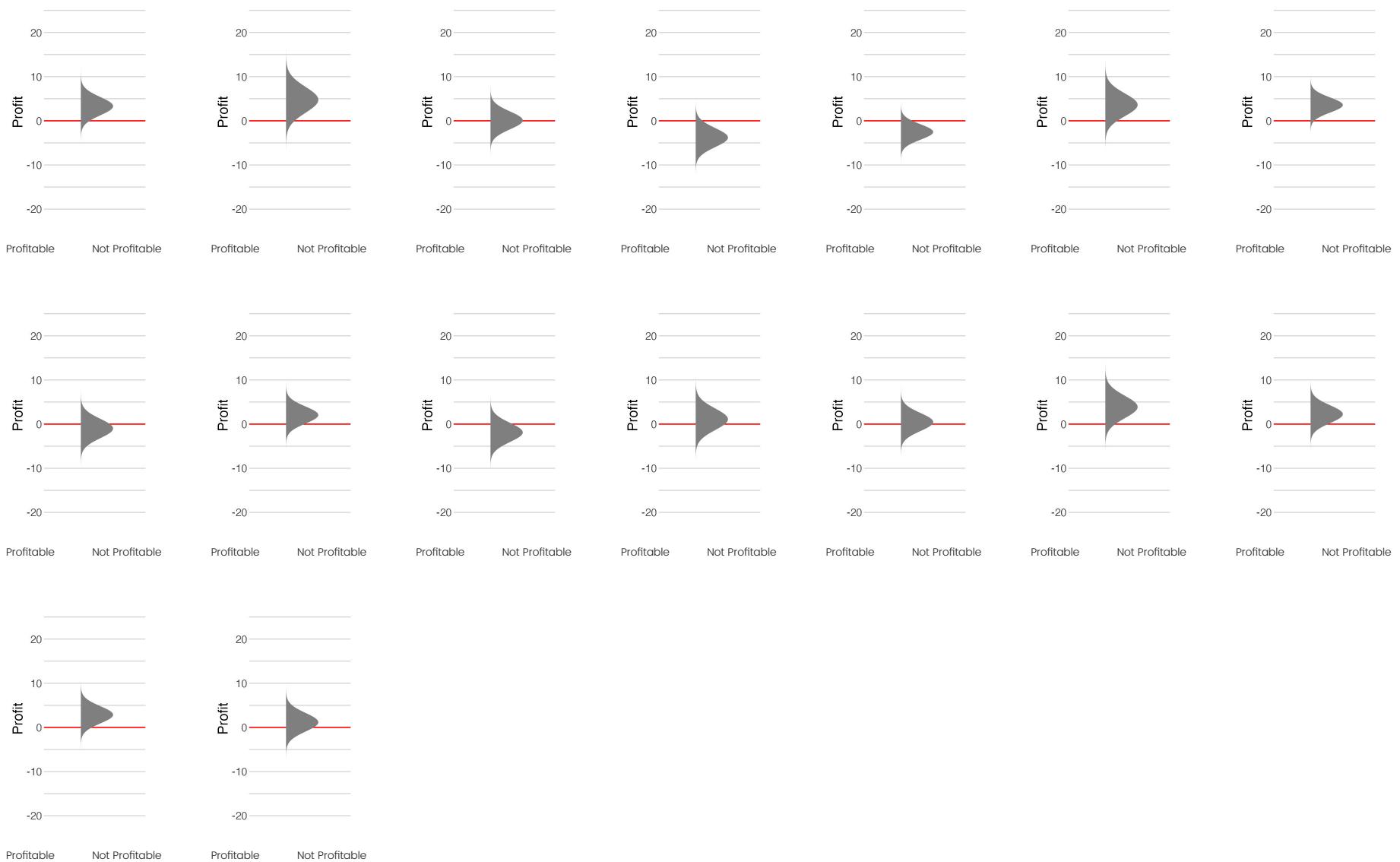
Region(s) selected in the last trial: I,2,3,4,5,6,7,8,9,I0,I1,I2,I3,I4,I5,I6; Total Points: -1450



Trial number: 7/10

Which of the regions are profitable?

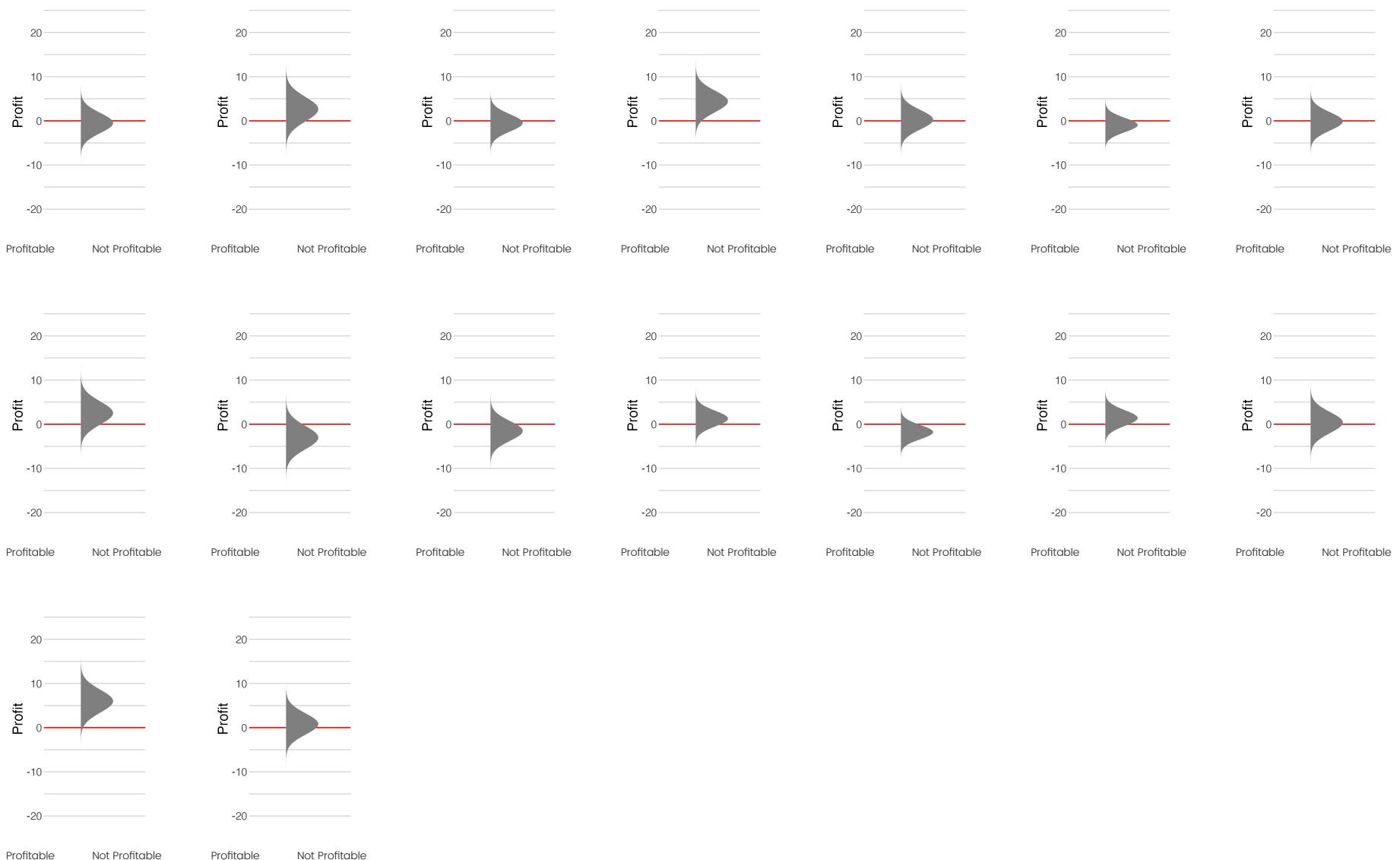
Region(s) selected in the last trial: None; Total Points: -1540



Trial number: 8/10

Which of the regions are profitable?

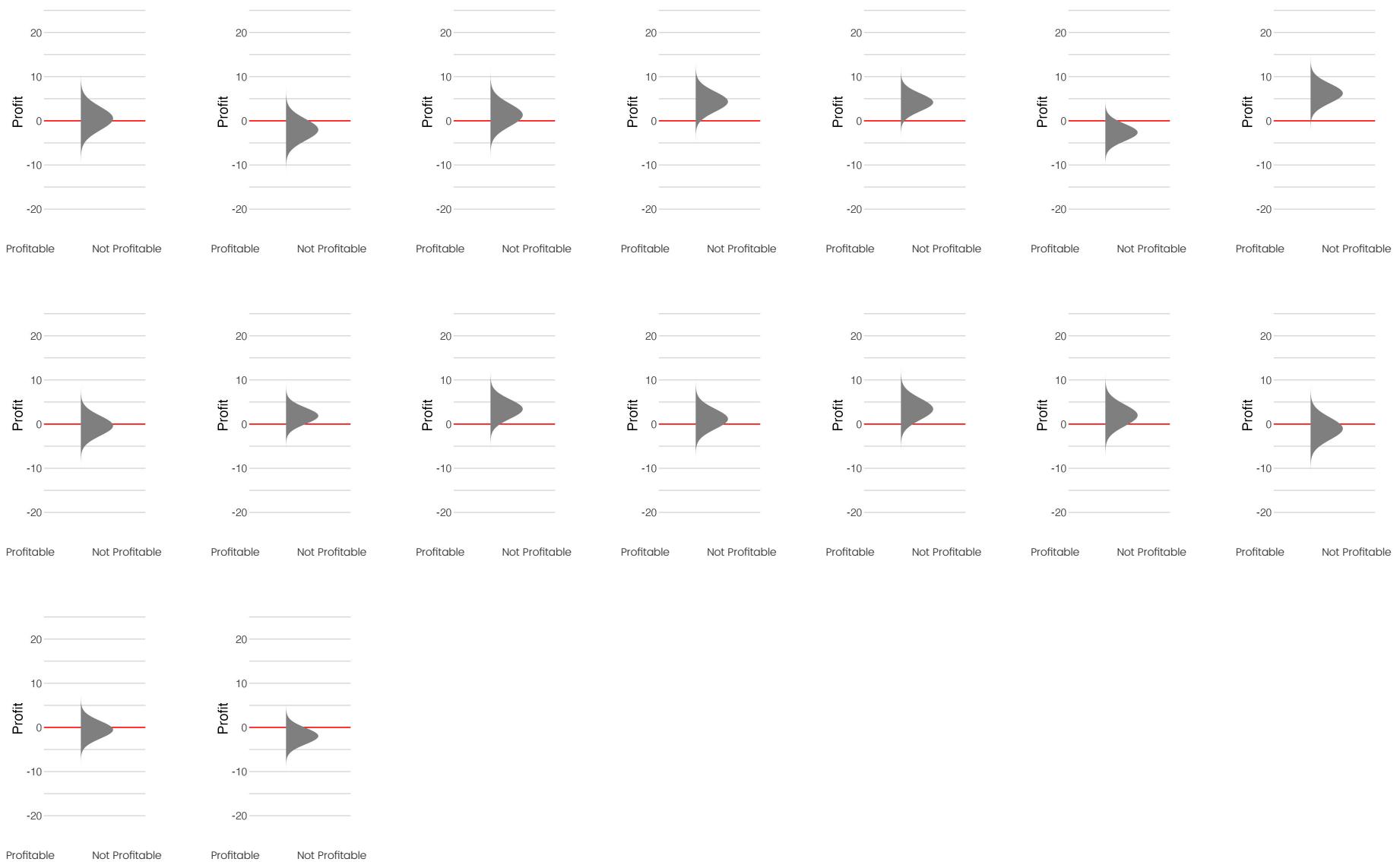
Region(s) selected in the last trial: None; Total Points: -1630



Trial number: 9/10

Which of the regions are profitable?

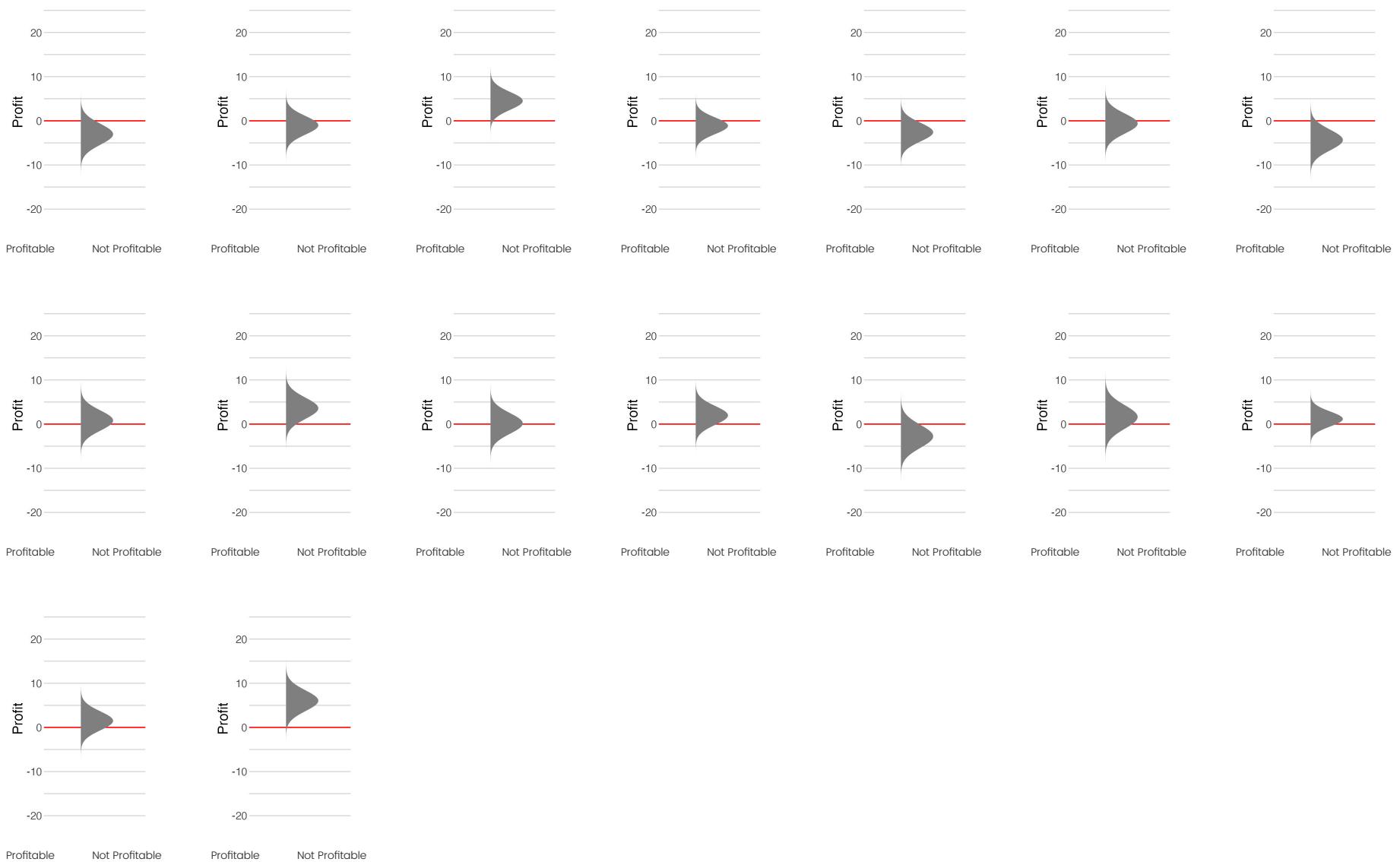
Region(s) selected in the last trial: None; Total Points: -1720



Trial number: 10/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -1810



Region(s) selected in the last trial: None; Total Points: -1900

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On the next page you will be presented with the data for 12 regions (i.e. you will be presented with 12 graphs at the same time).

Recap: how your job performance is evaluated

Your job of picking out profitable regions without full sets of data is risky. You will win or lose corporate brownie points based on the rules below, and of course **your goal is to maximize your points for the next promotion** (and bonus pay).

- If you think a region is profitable on average and **mark it as profitable** it (based on the data from the 20 stores), and that region **does have** an average profit greater than zero based on all 200 stores, you will receive 50 points.
- If you **mark a region as not profitable**, and that region **does not** have a profit greater than zero on average, you will receive 10 points.
- If you **mark a region as profitable**, and that region **does not** have a profit greater than zero, on average, you will lose 150 points.
- If you **mark a region as not profitable**, and that region **does have** a profit greater than zero, on average, you will lose 40 points.

	region profit > 0	region profit < 0
Mark a region as profitable	Win 50 points	Lose 150 points
Mark a region as not profitable	Lose 40 points	Win 10 points

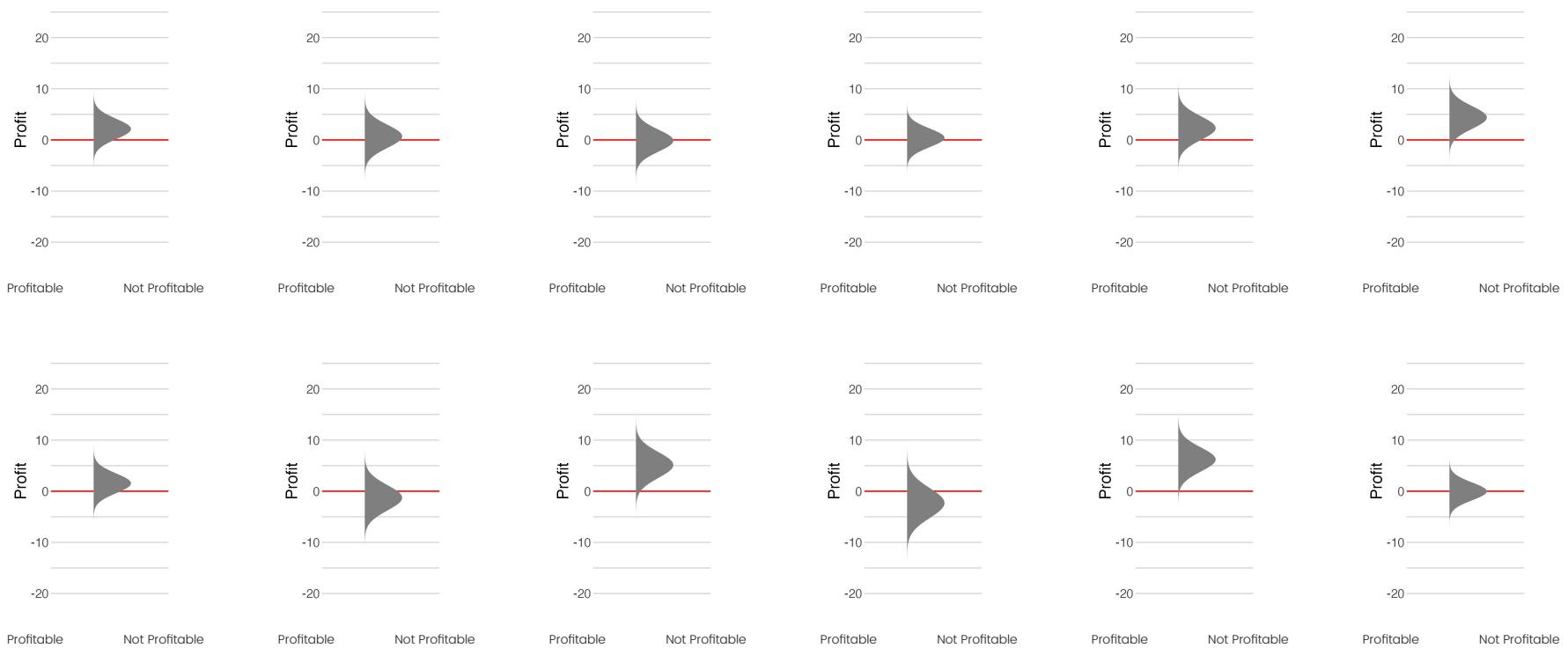
Note:

It is possible that you may end up with negative points. Please do not worry if that is the case. You are still guaranteed the minimum of \$5 for your participation.

Trial number: 1/10

Which of the regions are profitable?

Region(s) selected in the last trial: undefined; Total Points: -1900



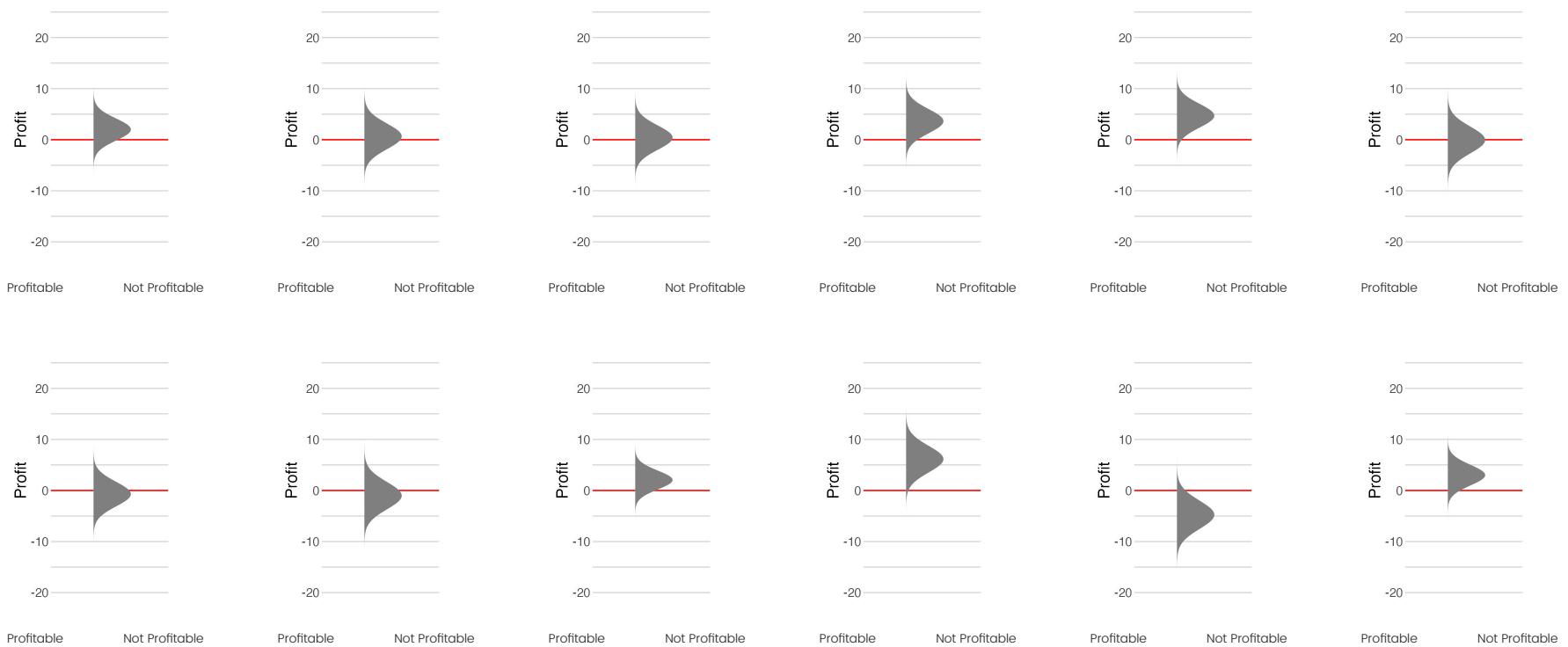
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Trial number: 2/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -1980



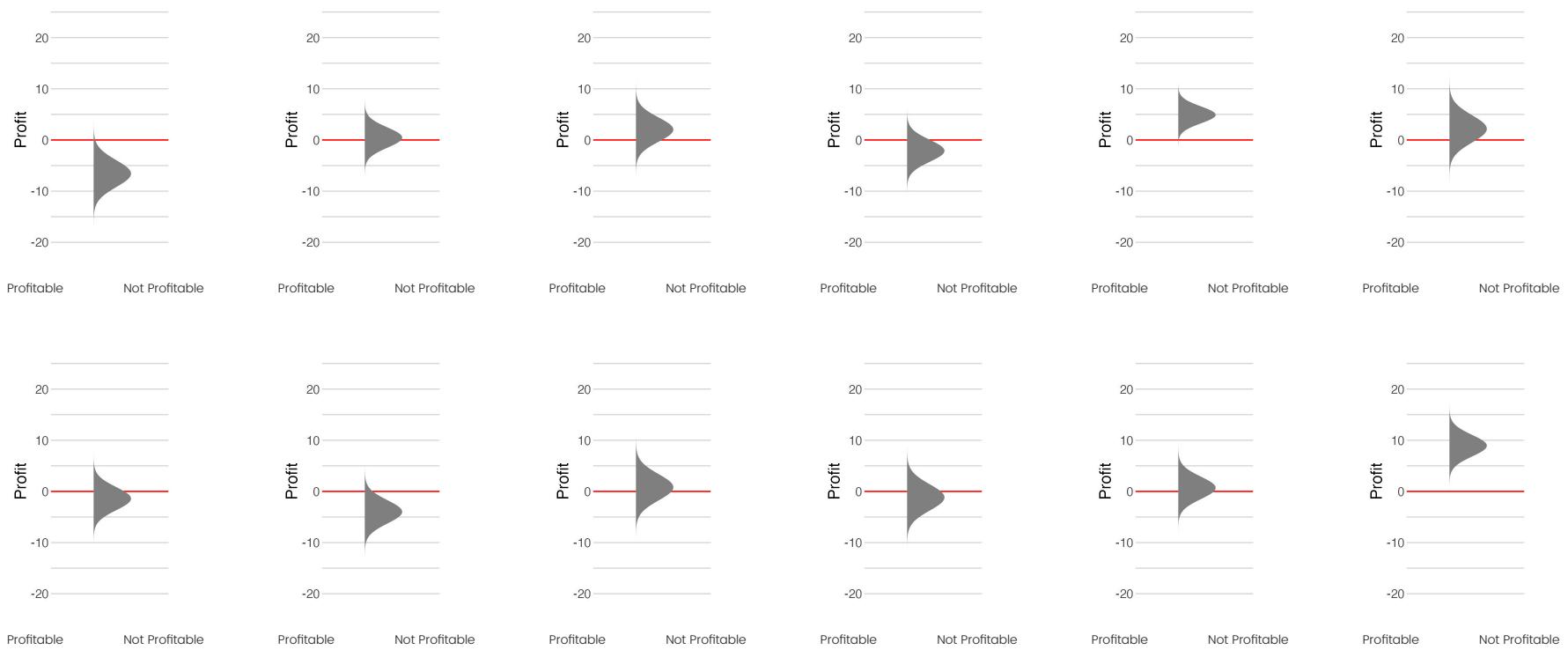
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Trial number: 3/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2060



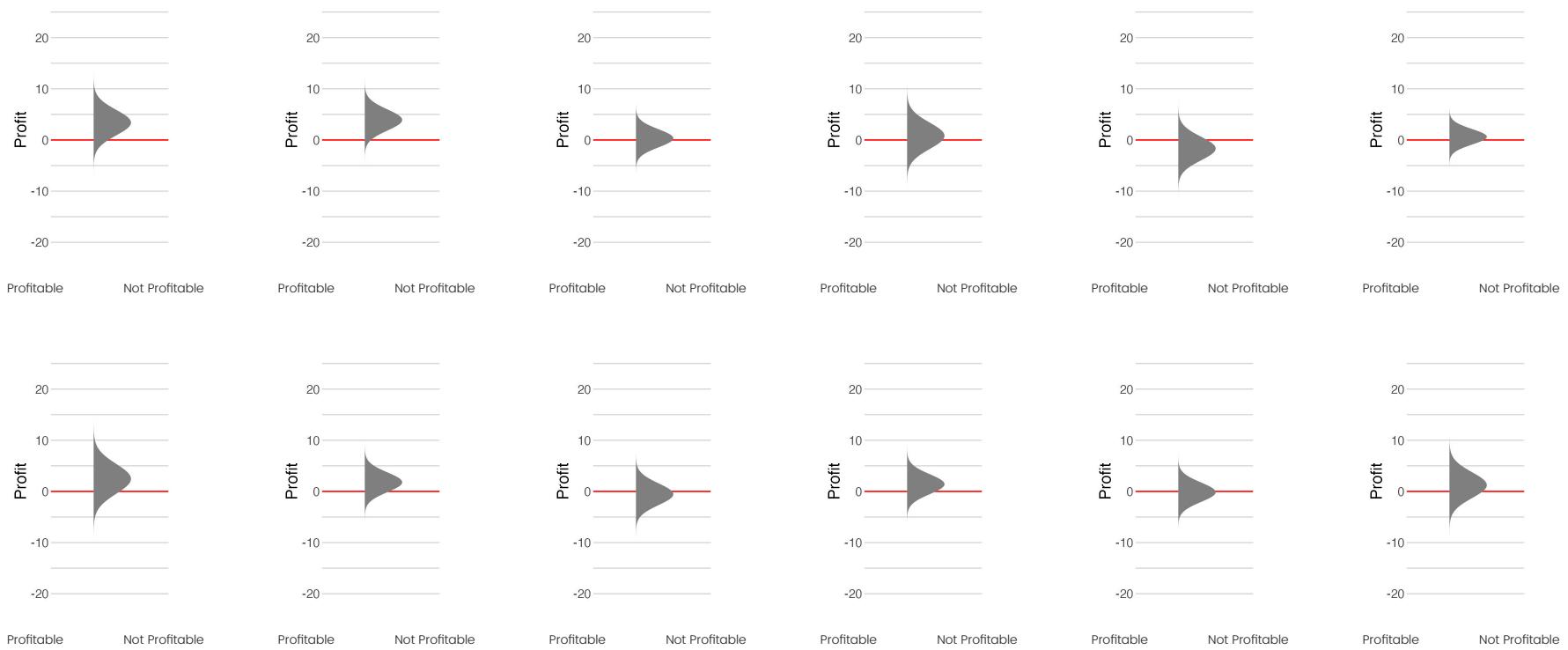
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Trial number: 4/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2140



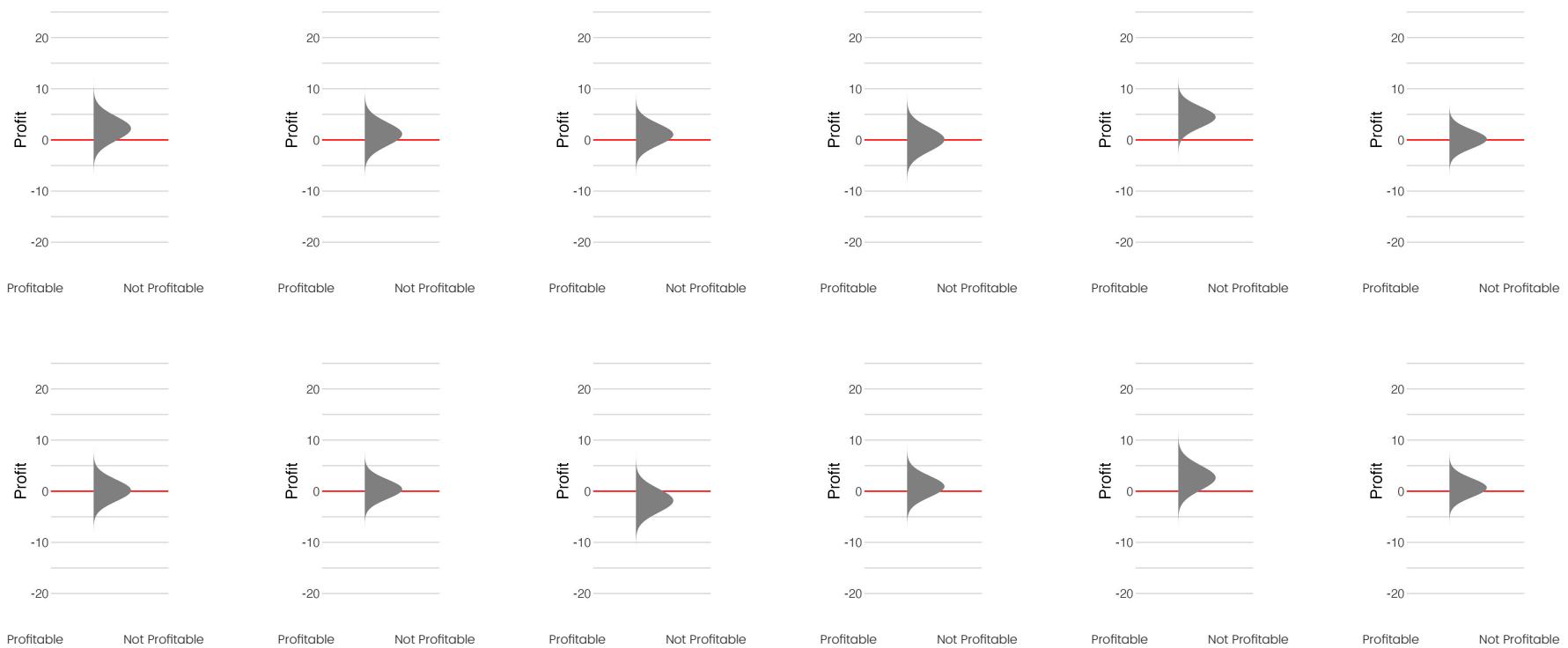
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Trial number: 5/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2220



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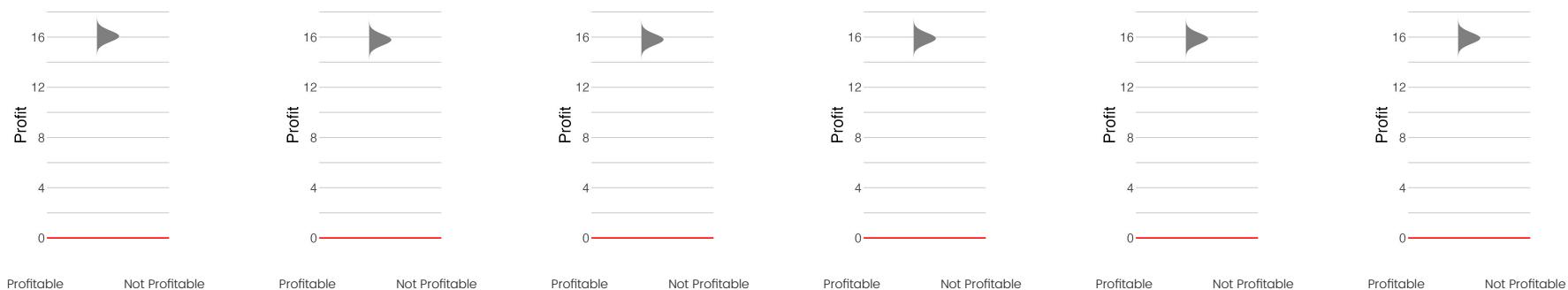
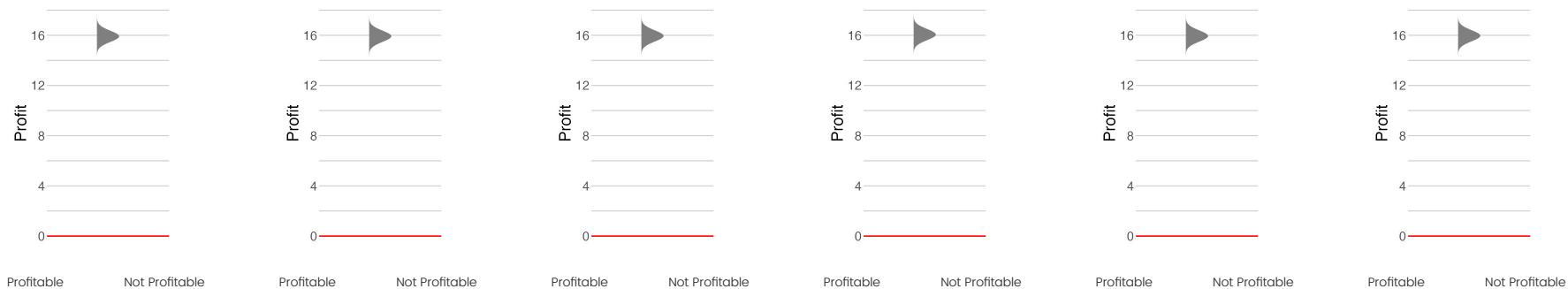
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Trial number: 5/10

Which of the regions are profitable?

Mark all regions as profitable

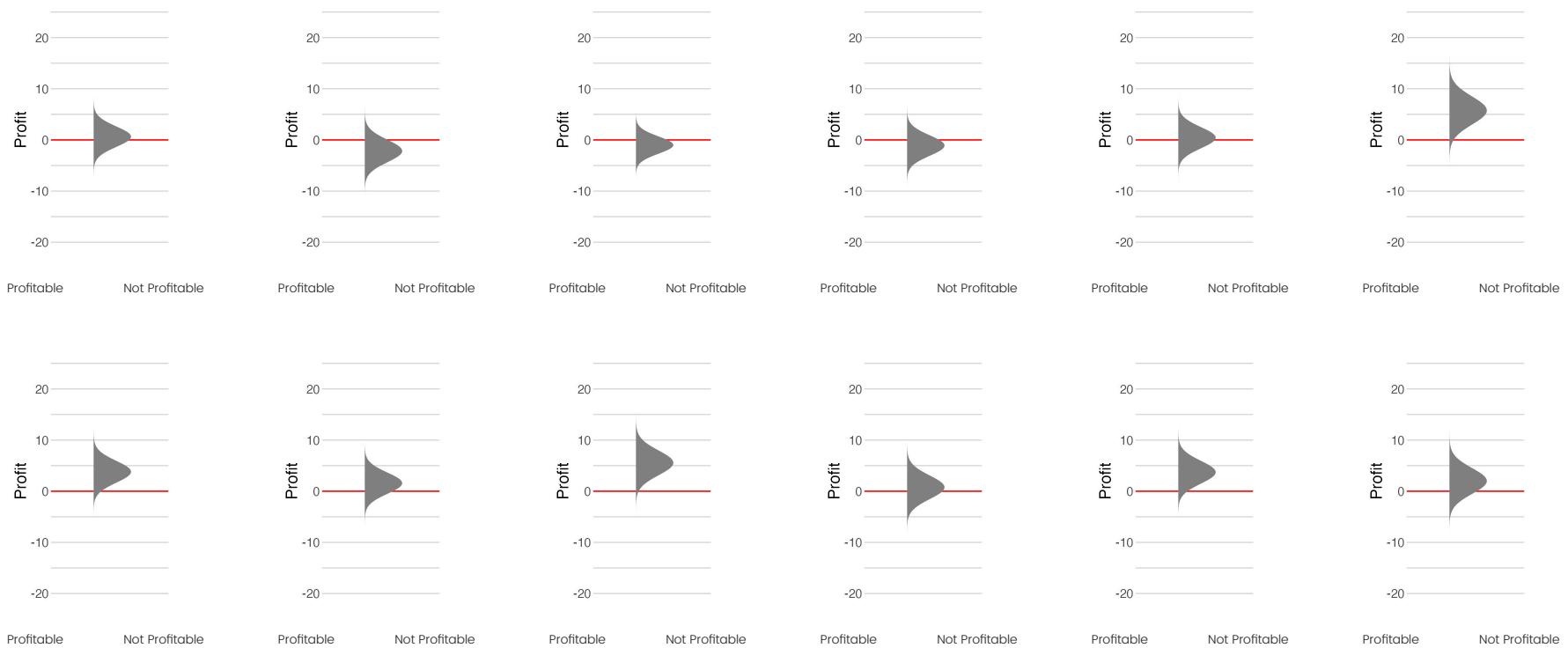
Region(s) selected in the last trial: None; Total Points: -2300



Trial number: 6/10

Which of the regions are profitable?

Region(s) selected in the last trial: I,2,3,4,5,6,7,8,9,I0,I1,I2; Total Points: -2300



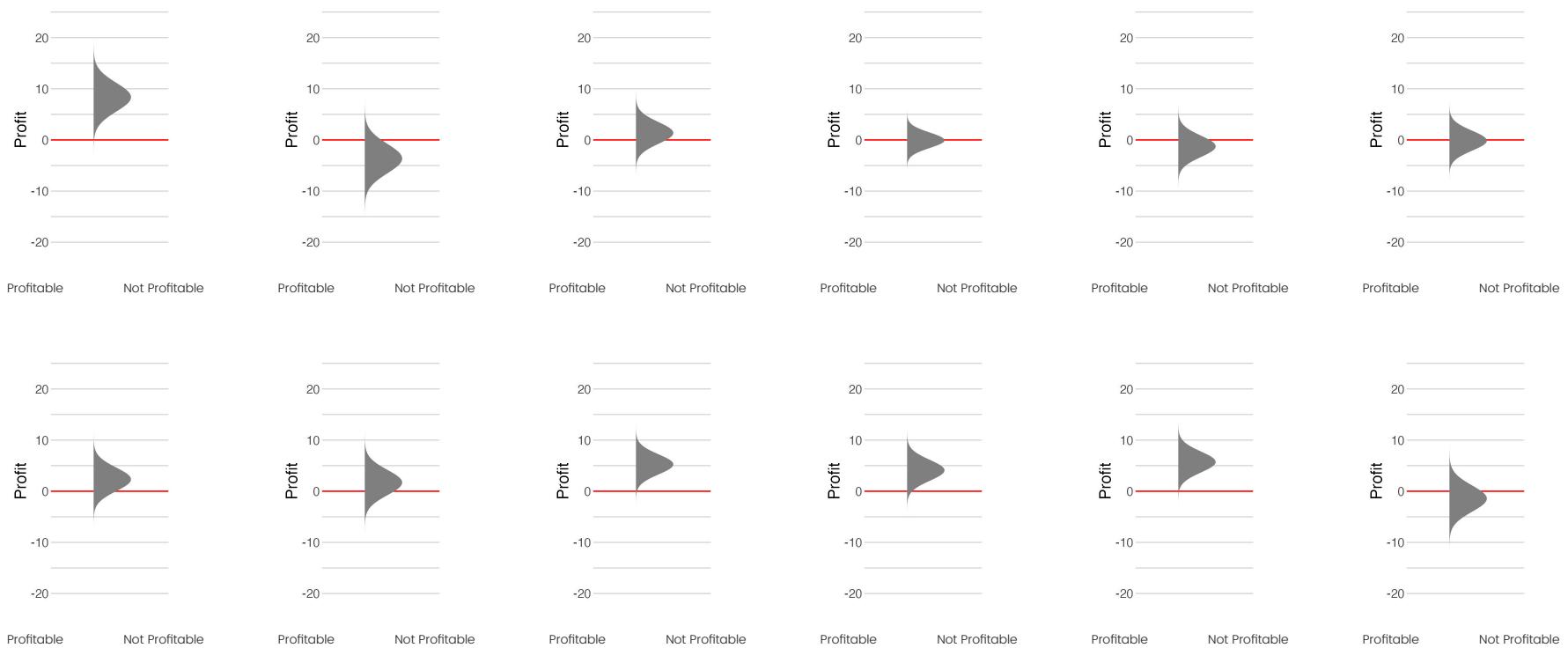
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Trial number: 7/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2380



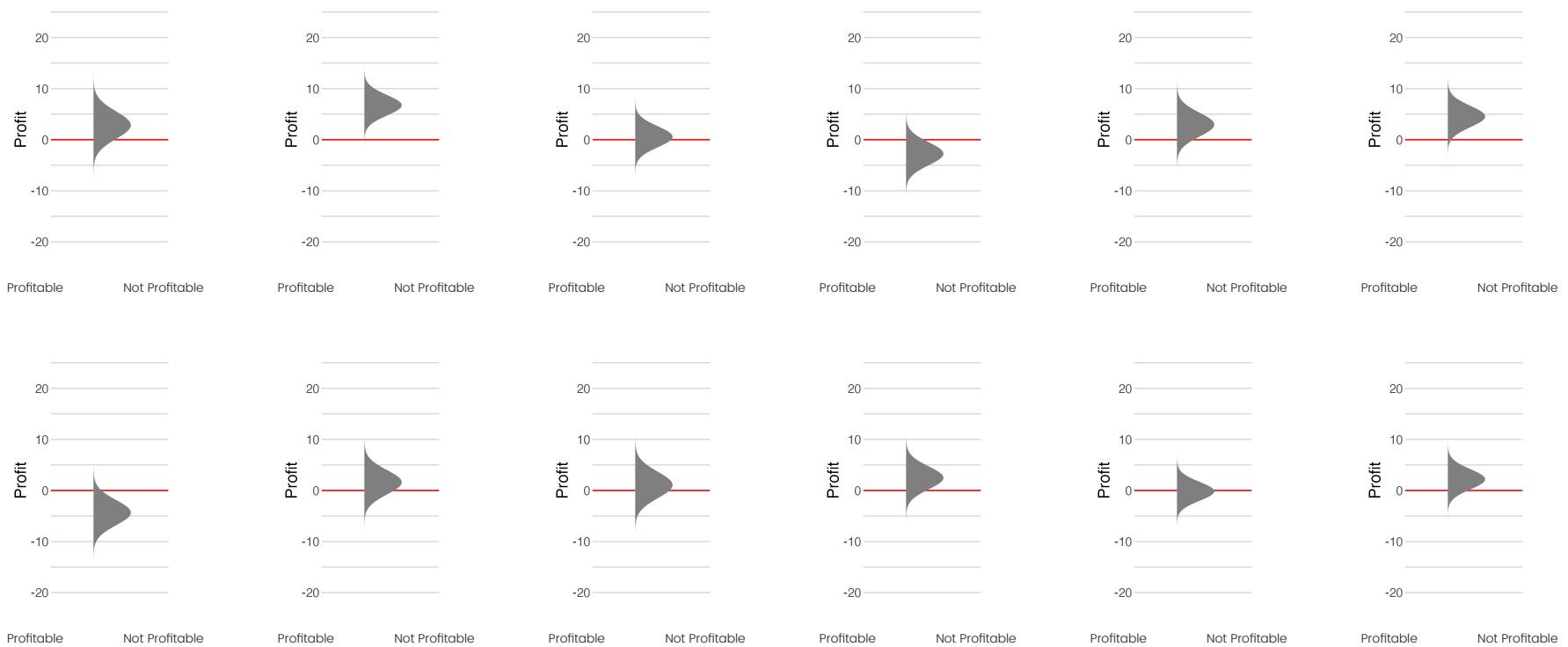
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Trial number: 8/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2460



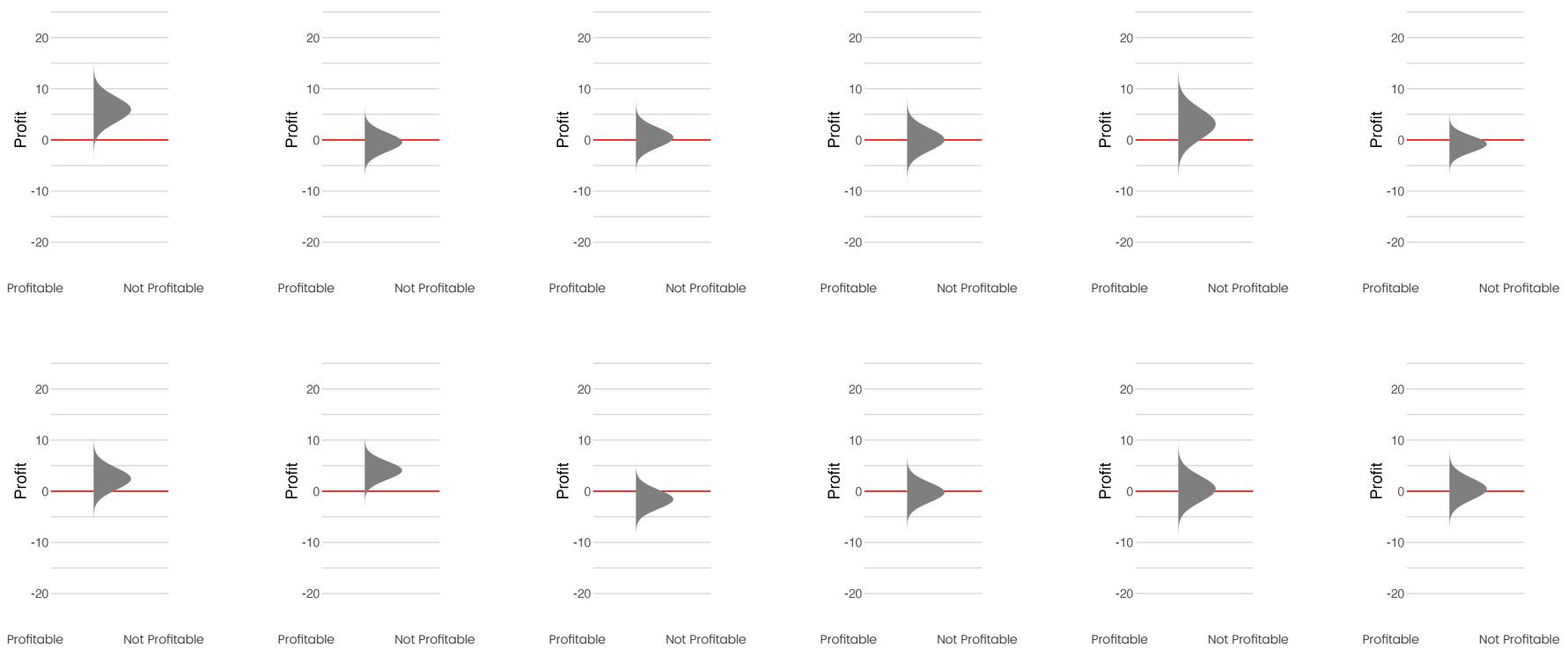
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Trial number: 9/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2540



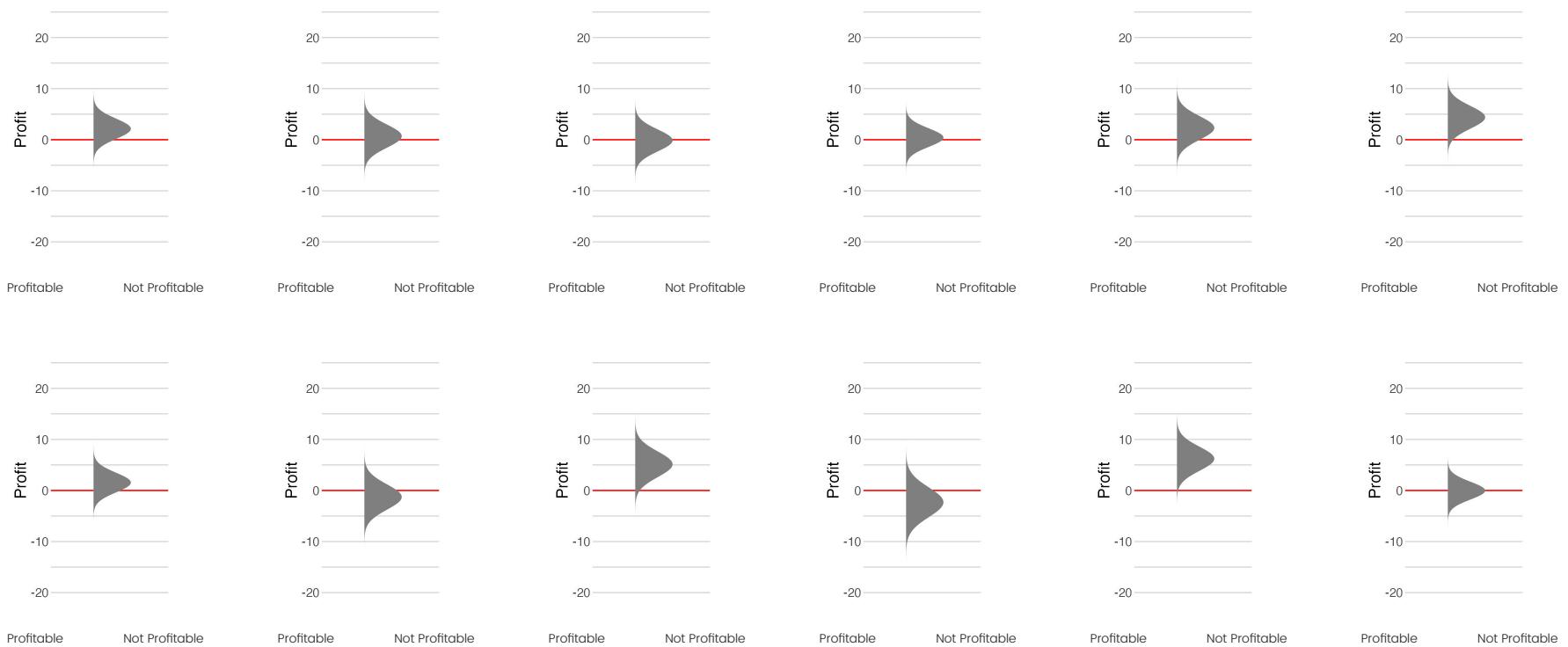
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Trial number: 10/10

Which of the regions are profitable?

Region(s) selected in the last trial: None; Total Points: -2620



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Region(s) selected in the last trial: None; Total Points: -2700

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Please describe the strategy that you used for performing the task

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Thank you for your time spent taking this survey.

Your total rewards were: -2700

Please paste the following completion code into Prolific:

Please make sure you **click on the Next button** below to finish the survey

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