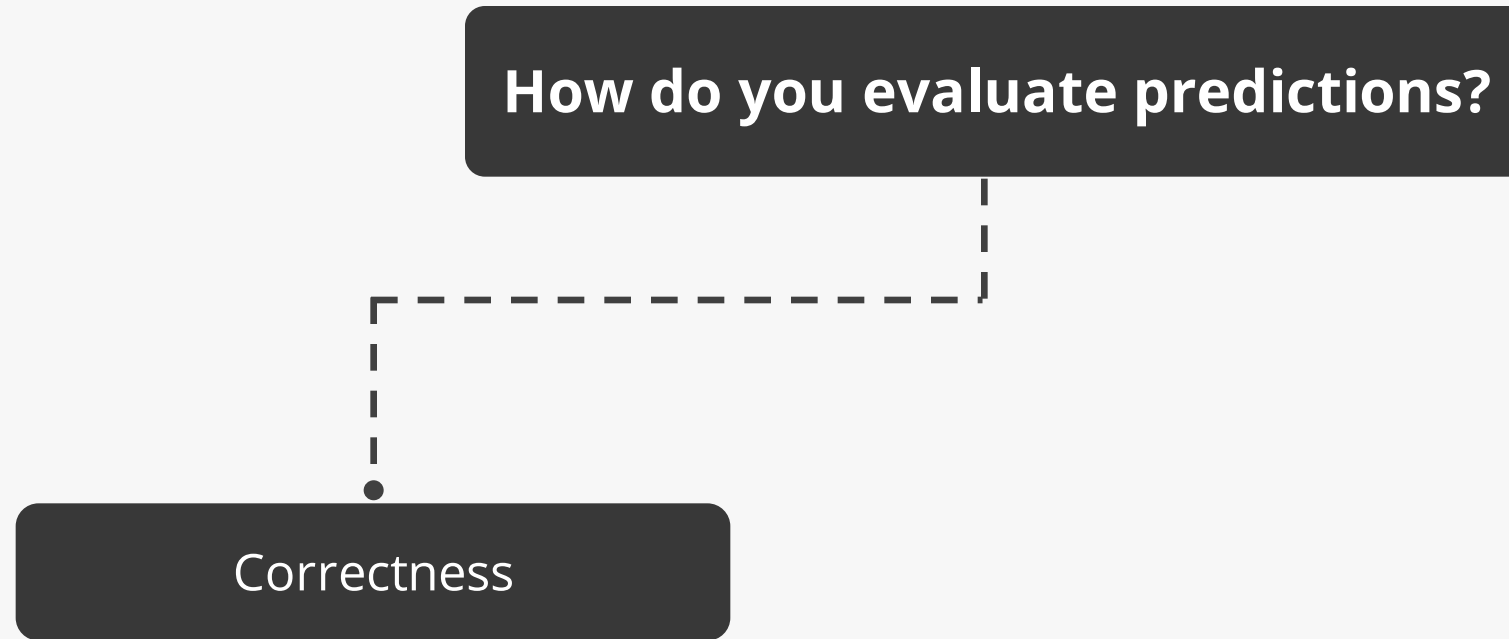


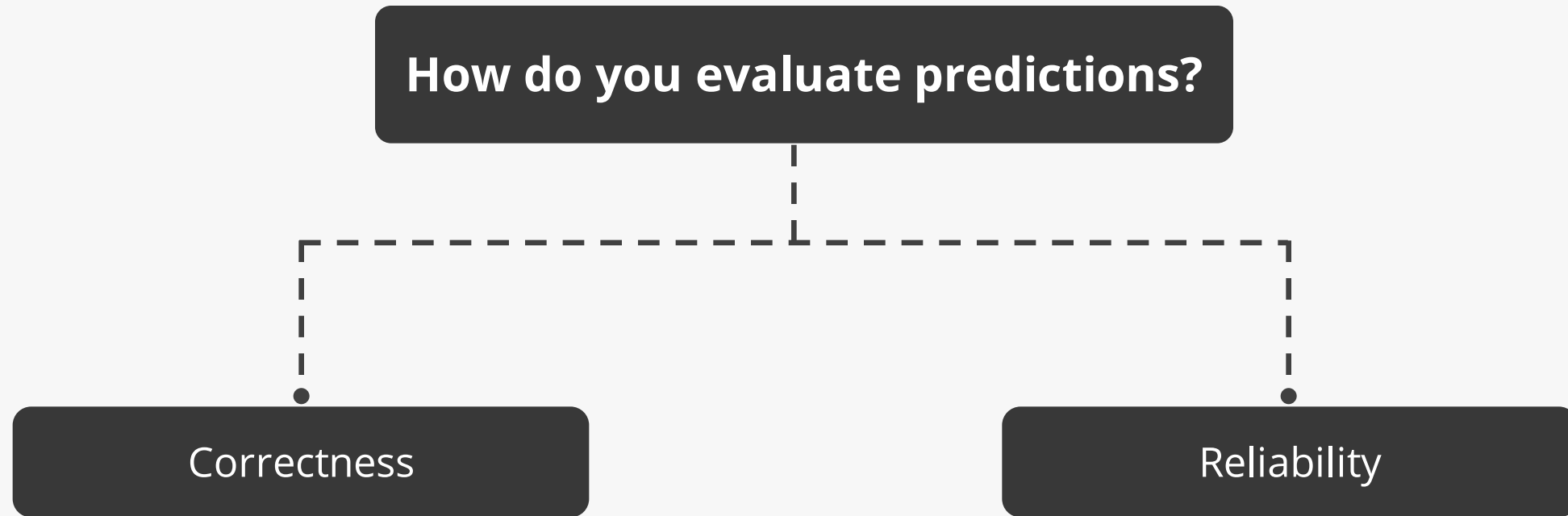


# How to Evaluate Predictions?

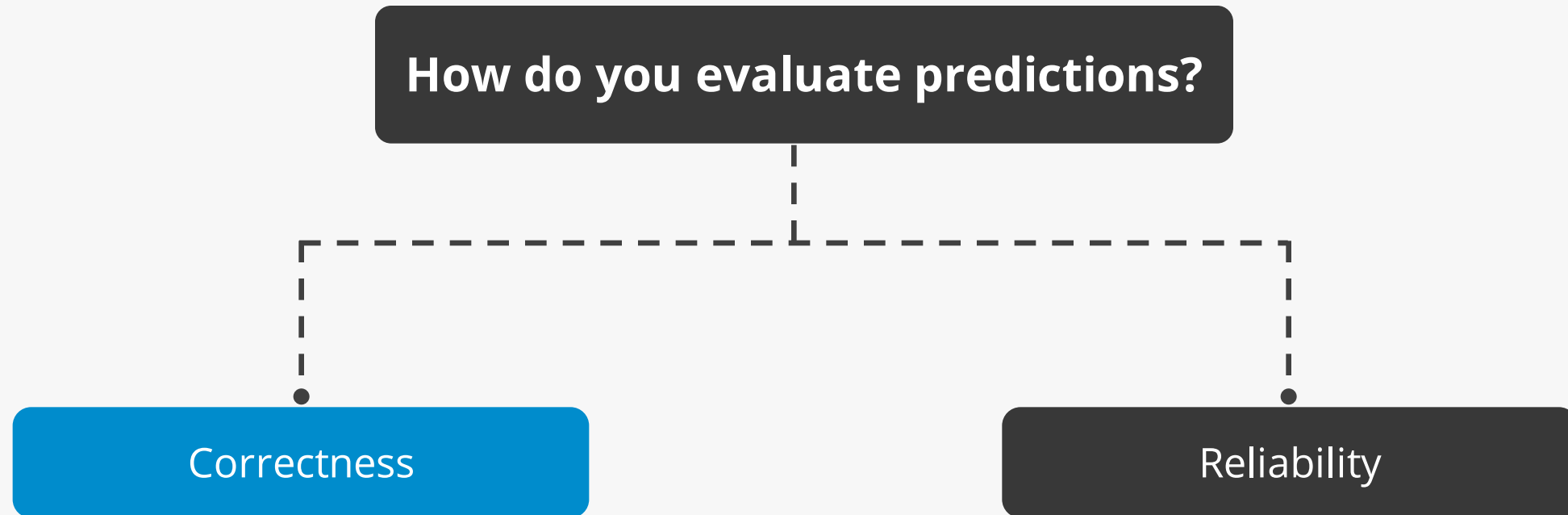
# How to Evaluate Predictions?



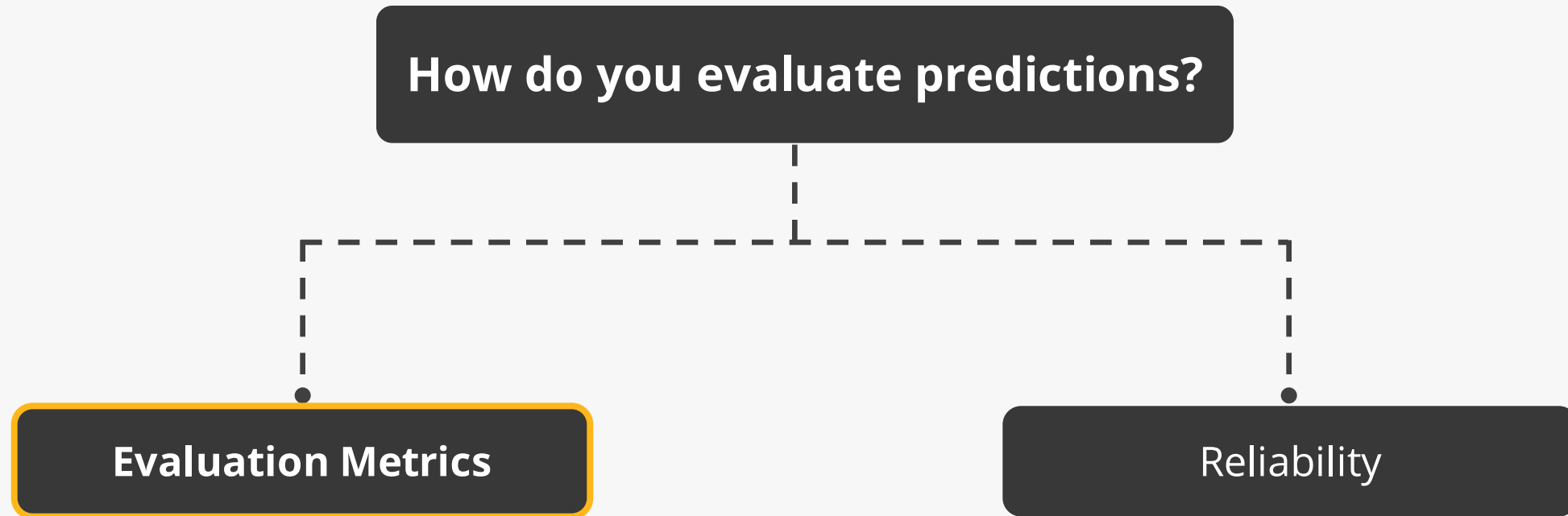
# How to Evaluate Predictions?



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# How to Evaluate Predictions?

How do you evaluate predictions?

Evaluation Metrics

- Mean Absolute Error (MAE)
- Root Mean Squared Error (RMSE)
- Accuracy
- Precision
- Recall

Reliability

# How to Evaluate Predictions?

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Reliability

# MAE Example

Actual Subscribers	Predicted Subscribers
3231	3110
3821	3804
4005	4097
3343	3298
3560	3376



# MAE Example

Actual Subscribers	Predicted Subscribers	Error
3231	3110	121
3821	3804	17
4005	4097	-92
3343	3298	45
3560	3376	184

# MAE Example

Actual Subscribers	Predicted Subscribers	Error
3231	3110	121
3821	3804	17
4005	4097	-92
3343	3298	45
3560	3376	184
Sum of Error		275

# MAE Example

Actual Subscribers	Predicted Subscribers	Error
3231	3110	121
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# MAE Example

Actual Subscribers	Predicted Subscribers	Error	Absolute Error
3231	3110	121	121
3821	3804	17	17
4005	4097	-92	92
3343	3298	45	45
3560	3376	184	184
	Sum of Errors	275	459

# MAE Example

Actual Subscribers	Predicted Subscribers	Error	Absolute Error
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3343	3298	45	45
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Sum of Errors		275	459

**Mean Absolute Error****459/5****91.8**

# MAE Example

Mean Absolute Error

91.8



Prediction of number of subscribers from the model generated an average error of **92**

# Steps To Calculate MAE

1 Take the predicted values from your model for each data point.





# Steps To Calculate MAE



- 1 Take the predicted values from your model for each data point.
- 2 Subtract the corresponding actual values from the predicted values.

# Steps To Calculate MAE



- 1 Take the predicted values from your model for each data point.
- 2 Subtract the corresponding actual values from the predicted values.
- 3 Convert the differences in absolute errors

# Steps To Calculate MAE



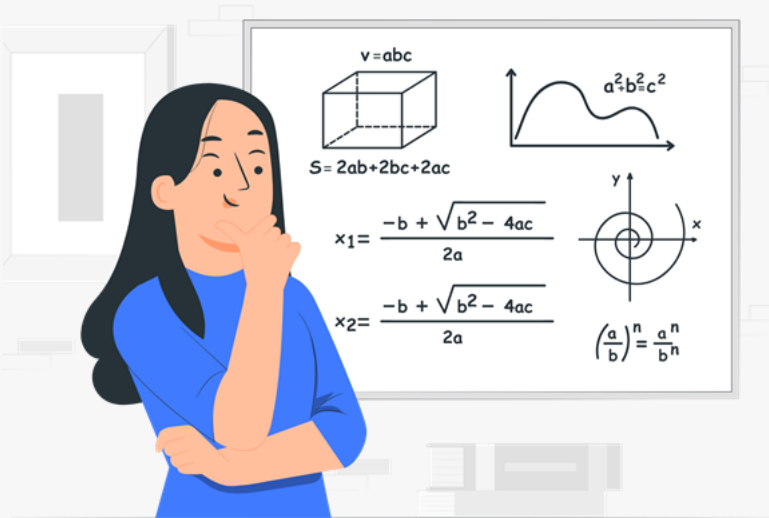
- 1 Take the predicted values from your model for each data point
- 2 Subtract the corresponding actual values from the predicted values
- 3 Convert the differences in absolute errors
- 4 Calculate the sum of absolute errors

# Steps To Calculate MAE



- 1 Take the predicted values from your model for each data point
- 2 Subtract the corresponding actual values from the predicted values
- 3 Convert the differences in absolute errors
- 4 Calculate the sum of absolute errors
- 5 Find the mean of absolute errors

# Formula To Calculate MAE



$$MAE = \frac{1}{n} \sum_{i=1}^n |\text{Predicted Value} - \text{Actual Value}|$$

**Note:** n represents the number of datapoints