

Lesson 11

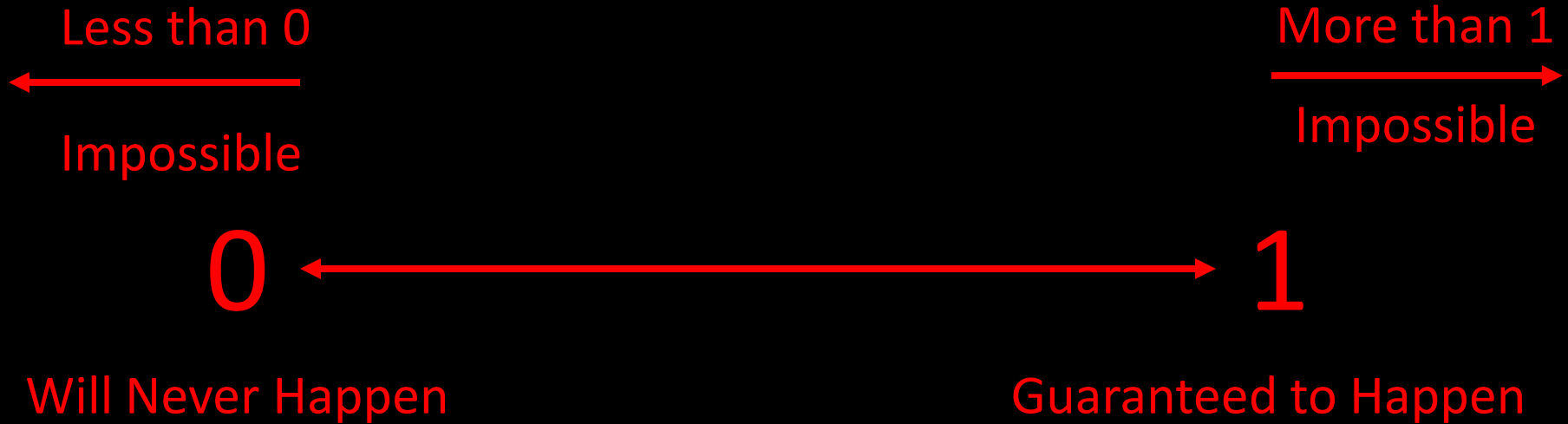
Introduction to Probability



Find the probability of randomly picking a ...



1. Orange marble out of the bag.
2. Blue marble out of the bag.
3. Green marble out of the bag.
4. Two green marbles in a row, without replacement.



The measure of the likeliness that an even will occur.

PROBABILITY

Find the Probability ...

... that a math student selected at random:

	Grades			Total
	A	B	C	
Stenger	15	9	4	28
Bird	24	15	15	54
Jamison	30	24	10	64
Price	28	15	11	54
Total	97	63	40	200

*

For all these, round to 3 sig figs.

1. Got an A in math.
2. Had Ms. Stenger as a teacher.
3. Had Ms. Stenger AND got an A in math.

* Data is totally made up.

Find the Probability ...

... that a math student selected at random:

	Grades			Total
	A	B	C	
Stenger	15	9	4	28
Bird	24	15	15	54
Jamison	30	24	10	64
Price	28	15	11	54
Total	97	63	40	200

1. Got an A or a B in math.
2. Had Ms. Price or Mr. Bird.
3. Had Mr. Bird or got an A.
4. Had Ms. Price or got a C.

$$\frac{54 + 97 - 24}{200} = \frac{127}{200} = 0.635$$

Find the Probability ...

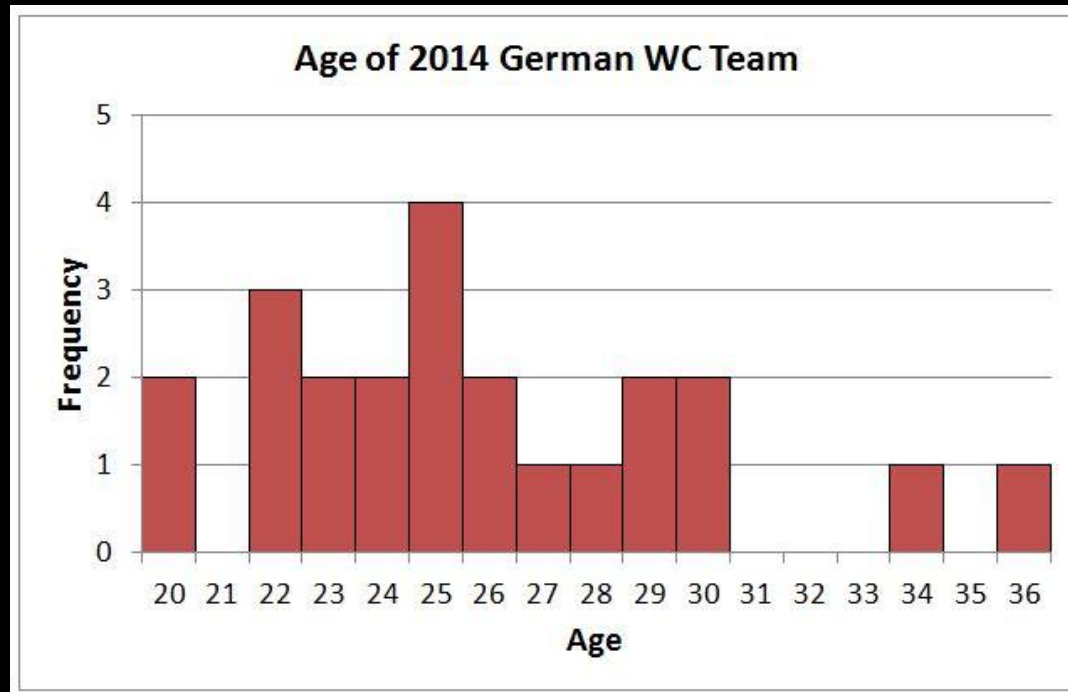
... that a math student selected at random:

	Grades			Total
	A	B	C	
Stenger	15	9	4	28
Bird	24	15	15	54
Jamison	30	24	10	64
Price	28	15	11	54
Total	97	63	40	200

1. Got at least a B in class.
2. Got at most a B in Ms. Stenger's class.

Using Histogram Data

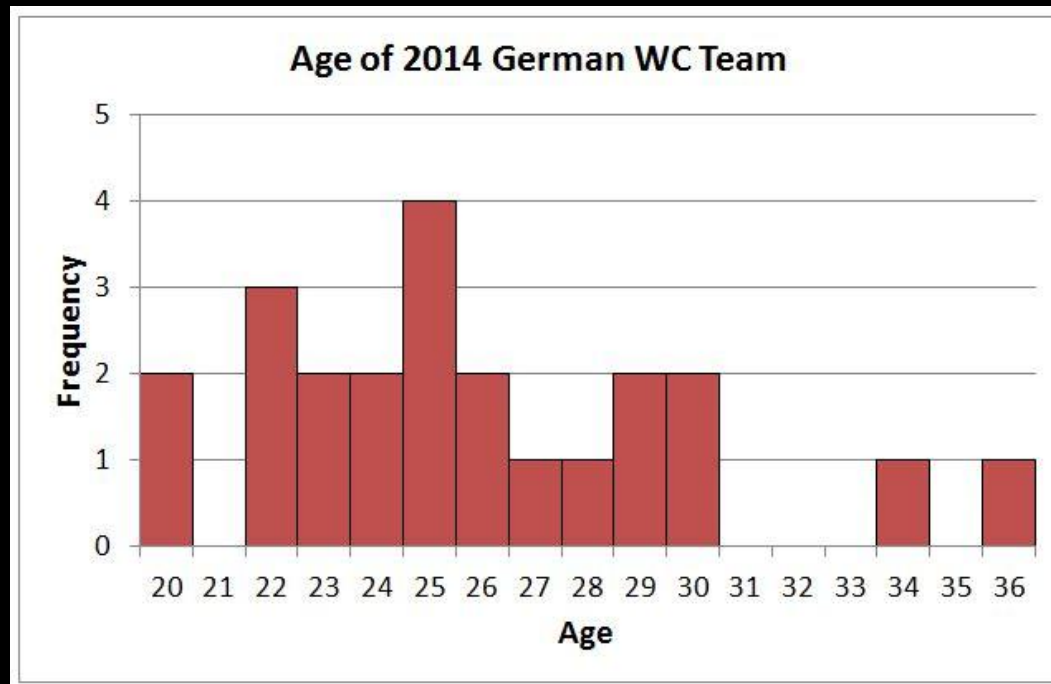
Find the probability, that a randomly selected player on the German Team ...



1. Is 25 years old.
2. Is 29 or 30 years old.

Using Histogram Data

Find the probability, that a randomly selected player on the German Team ...



1. Is at least 25 years old.
2. Is younger than 25 years old.

Data Collection: Simulation

- Get in groups of 2-3.
- One person uses phone to go to random.org and use the 4-dice generator.
- Another person(s) writes down the sums of the four rolls.
- Collect 40 sums, put data in a Google Spreadsheet, and share your results with me.



The image features a large, stylized white letter 'J' positioned on the left side. The background consists of concentric red rings that create a tunnel-like effect, leading towards a dark blue or black center. The overall aesthetic is reminiscent of a classic film title card or a stylized logo.

J