

24th October



Corbettmaths

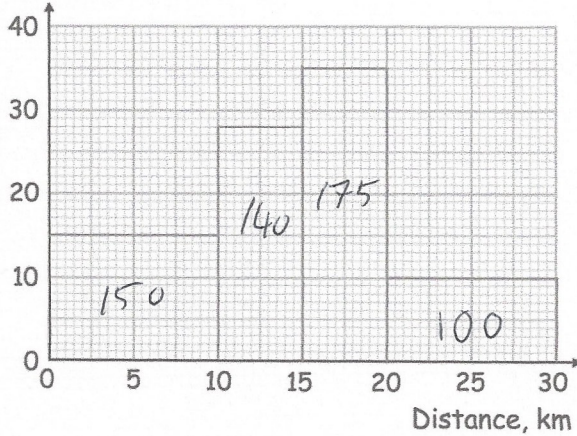
Harry has rounded a number to 10 to one significant figure.

Write down the upper bound and lower bound.

$$LB = 9.5$$

$$UB = 15$$

Frequency Density



Hannah surveyed students on how far they travel to college

5 Even 4 odd

How many students did Hannah survey?

$$565$$

Calculate an estimate of the mean distance travelled

Distance	f	fd	
0-10	150	750	8062.5 ÷ 565 = 14.27 km
10-15	140	1750	
15-20	175	3062.5	
20-30	100	2500	
		8062.5	

2 2 3 4 5 6 6 7 9

Rebecca has 9 cards, each with a number on it. She picks three cards at random, without replacement. Rebecca adds the three numbers to get a score.

EEE EEO
OEO OOE

Calculate the probability that the score is an even number

$$P(EEE) = \frac{5}{9} \times \frac{4}{8} \times \frac{3}{7} = \frac{5}{42}$$

$$P(EEO) = \frac{5}{9} \times \frac{4}{8} \times \frac{3}{7} = \frac{5}{42}$$

$$P(OEO) = \frac{4}{9} \times \frac{5}{8} \times \frac{3}{7} = \frac{5}{42}$$

$$P(OOE) = \frac{4}{9} \times \frac{3}{8} \times \frac{5}{7} = \frac{5}{42}$$

$$\frac{10}{21}$$

Express $3x^2 + 18x - 1$ in the form $a(x + b)^2 + c$

$$3(x^2 + 6x) - 1$$

$$3[(x+3)^2 - 9] - 1$$

$$3(x+3)^2 - 27 - 1$$

$$3(x+3)^2 - 28$$