Conditional probability from a two-way table

Maths

Mrs Dennett

Conditional probability from a two-way table

1. The two-way table shows the music students like best.

	Rock	Hip-Hop	Pop	Other	Total
Male	17	25	5	8	55
Female	30	15	25	5	75
Total	47	40	30	13	130

a) What is the probability that two student picked at random like pop music?

b) What is the probability that two students picked at random like rock music and one is Male and the other female?

2. The two-way table displays what year 7 and 11 students have at dinner time.

	Packed Lunch	School Dinners
Year 7	60	25
Year 11	30	55

a) What is the probability that two students picked at random have school dinners?

b) What is the probability that two students picked at random have the same type of dinner?

Answers

Conditional probability from a two-way table

1. The two-way table shows the music students like best.

	Rock	Hip-Hop	Pop	Other	Total
Male	17	25	5	8	55
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Total	47	40	30	13	130

a) What is the probability that two students picked at random like pop music? $\dfrac{29}{559}$

b) What is the probability that two students picked at random like rock music and one is male and the other female? $\dfrac{34}{559}$

2. The two-way table displays what year 7 and 11 students have at dinner time.

	Packed Lunch	School Dinners
Year 7	60	25
Year 11	30	55

a) What is the probability that two students picked at random have school dinners? $\dfrac{632}{2873}$

b) What is the probability that two students picked at random have the same type of dinner? $\dfrac{1433}{2873}$