Practice worksheet | Probability

Conditional language and restricted sample spaces

Name: _____ Date: _____

6 questions | 13 marks

1. A fair six-sided die result is known to exceed 3. Find P(even). [2 marks]

2. A fair six-sided die result is known to be even. Find P(greater than 3). [2 marks]

3. Find P(cycle|girl) from the table. [2 marks]

Invented survey of 60 students; every student is in exactly one travel category.

Travel	Girl	Boy	Total
Cycle	12	8	20
Walk	18	22	40
Total	30	30	60

4. Find P(girl|cycle) from the table. [2 marks]

Invented survey of 60 students; every student is in exactly one travel category.

Travel	Girl	Boy	Total
Cycle	12	8	20
Walk	18	22	40
Total	30	30	60

5. Using the travel table, explain why P(cycle|girl) and P(girl|cycle) have different denominators. [3 marks]

Invented survey of 60 students; every student is in exactly one travel category.

Travel	Girl	Boy	Total
Cycle	12	8	20
Walk	18	22	40
Total	30	30	60

6. P(A and B)=0.12 and P(B)=0.3. Find P(A|B). [2 marks]