Football Statistics (2006-07 season)

- 1a) For the scores 0-0, 1-0, 1-1, 2-0, 2-1 list the possible half-time scores.
- 1b) Can you say how you can work out the number of half time results?
- 1c) How many possible half time scores do you think there will be for a 2-2 result?



- 2. When a game ends in a score of 2-2
- a) What's the probability that only one goal was scored in the first half?
- b) What's the probability that at least one goal was scored in the first half?
- 3. Complete the missing information in the table (to work out the cost of a home goal for season ticket holders). Which season ticket is the best value and which is the worst?

Club	Season ticket price range	'Average' mid point season ticket price (lowest + highest price) ÷ 2	Goals	Cost per home goal
Arsenal	£885 - £1825	£1355	43	£31.51
Aston Villa	£330 - £500	£415	20	£20.75
Blackburn	£299 - £399	£349	31	
Bolton	£459 - £498	£478.50	26	
Charlton	£315 - £475		19	
Chelsea	£650 - £1150		37	
Everton	£427 - £516		33	
Fulham	£299 - £749		18	
Liverpool	£650 - £700		39	
Man City	£385 - £550		10	
Man Utd	£475 - £836		46	
Middlesbrough	£410 - £580		31	
Newcastle	£365 - £596		23	
Portsmouth	£585 - £745		28	
Reading	£545 - £595		29	
Sheffield Utd	£419 - £499		24	
Tottenham	£579 - £1150		34	
Watford	£349 - £449	£399	19	£21.00
West Ham	£595 - £850	£722.50	24	£30.10
Wigan	£250	£250	18	£13.89

Football Statistics - Answers

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Full Time Result	Half Time Scores	No. of possible half time scores
0-0	0-0	1 result
1-0	0-0, 1-0	2 results
1-1	0-0, 1-0, 0-1, 1-1	4 results
2-0	0-0, 1-0, 2-0	3 results
2-1	0-0, 1-0, 0-1, 1-1, 2-0, 2-1	6 results
2-2	3 x 3 = 9 possible results (0-0 0-1 0-2 1-0 2-0 1-1 1-2 2-1 2-	-2)

To work out the number of possible half time scores add 1 to no. of goals scored by each side (at full time) and then multiply. E.g. Full time result 1-0: $2 \times 1 = 2$ possible half time scores; full time result of 1-1: $2 \times 2 = 4$ possible results; etc.

Note: questions 1b and 1c are beyond the limits of the Level 1 (and 2) Adult Numeracy Curriculum but are ideal for extension work and make for interesting discussion.

2 a) 2/9 (0 -1 or 1-0 from a possible 9 scores) b) 8/9 (all possible half time scores except 0-0)

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Club	Season ticket price range	'Average' mid point season ticket price (lowest + highest price) ÷ 2	Goals	Cost per home goal
Arsenal	£885 - £1825	£1355	43	£31.51
Aston Villa	£330 - £500	£415	20	£20.75
Blackburn	£299 - £399	£349	31	£11.26 best
Bolton	£459 - £498	£478.50	26	£18.40
Charlton	£315 - £475	£245	19	£12.89
Chelsea	£650 - £1150	£900	37	£24.32
Everton	£427 - £516	£471.50	33	£14.28
Fulham	£299 - £749	£524	18	£29.11
Liverpool	£650 - £700	£675	39	£17.31
Man City	£385 - £550	£467.50	10	£46.75 worst
Man Utd	£475 - £836	£655.50	46	£14.25
Middlesbrough	£410 - £580	£494	31	£15.96
Newcastle	£365 - £596	£480.5	23	£20.89
Portsmouth	£585 - £745	£665	28	£23.75
Reading	£545 - £595	£570	29	£19.66
Sheffield Utd	£419 - £499	£459	24	£19.13
Tottenham	£579 - £1150	£864.50	34	£25.43
Watford	£349 - £449	£399	19	£21.00
West Ham	£595 - £850	£722.50	24	£30.10
Wigan	£250	£250	18	£13.89