MATHS WORKSHEETS- PROBABILITY- USING LANGUAGE OF AT LEAST

Answer the following questions:

1	When a coin is tossed three times, what is the probability of getting (a) at least one head (b) at least one tail	
2	When a coin is tossed four times, what is the probability of getting (a) at least one head (b) at least one tail	
3	In a family of four children, find the probability of having at least (a) one girl (b) one boy	
4	In a family of three children, find the probability of having at least (a) one girl (b) one boy	

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Answer Key:

1	S = {HHH, HHT, HTH, HTT, THH, THT, TTH, TTT} Total number of Sample Space = 8 (a) at least 1 head: 7/8 {HHH, HHT, HTH, HTT, THH, THT, TTH} (b) at least one tail: 7/8 {HHT, HTH, HTT, THH, THT, TTH, TTT}
2	S= {HHHH, HHHT, HHTH, HHTT, HTHH, HTHT, HTTH, HTTT, THHH, THHT, THTH, THTT, TTHH, TTHT, TTTH, TTTT} Total number of Sample Space = 16 (a) at least 1 head: 15/16 {HHHH, HHHT, HHTH, HHTT, HTHH, HTHT, HTTH, HTTT, THHH, THHT, THTH, THTT, TTHH, TTHT, TTTH} (b) at least one tail: 15/16 {HHHT, HHTH, HHTT, HTHH, HTHT, HTTH, HTTT, THHH, THHT, THTH, THTT, TTHH, TTHT, TTTH, TTTT}
3	S= {BBBB, BBBG, BBGB, BBGG, BGBB, BGBG, BGGB, BGGG, GBBB, GBBG, GBGB, GBGG, GGBB, GGBG, GGGB, GGGG} Total number of Sample Space = 16 (a) at least 1 Girl: 15/16 {BBBG, BBGB, BBGG, BGBB, BGBG, BGGB, BGGG, GBBB, GBBG, GBGB, GBGG, GGBB, GGBG, GGGB, GGGG} (b) at least 1 Boy: 15/16 {BBBB, BBBG, BBGB, BBGG, BGBB, BGBG, BGGB, BGGG, GBBB, GBBG, GBGB, GBGG, GGBB, GGBG, GGGB}
4	S = {BBB, BBG, BGB, BGG, GBB, GBG, GGB, GGG} Total number of Sample Space = 8 (a) at least 1 Girl: 7/8 {BBG, BGB, BGG, GBB, GBG, GGB, GGG} (a) at least 1 Boy: 7/8 {BBB, BBG, BGB, BGG, GBB, GBG, GGB}