**Sample Space Diagrams GREEN**

1) A tetrahedral dice (four sided) is numbered 3, 4, 5, 6. Two are thrown and the product of the scores noted. Complete the sample space diagram.

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Find the probability that:

a) The score is less than 14 (<14) = \_\_\_\_\_

b) The score is exactly 18 (18) = \_\_\_\_\_

c) The score is an odd number (odd) = \_\_\_\_\_

d) The score is a square number (square) = \_\_\_\_\_

2) Two unbiased dice are numbered 2, 2, 4, 4, 6, 6. They are thrown together and the sum of the two scores is found. Draw a sample space diagram and find the probability that:

a) The sum is 10

b) The sum is an odd number

c) The sum is a square number

d) The sum is greater than 6

3) There are 5 cards numbered 1 to 5. One card is selected at random then replaced in the pack. A second card is then selected at random. Draw sample space diagrams in your book and find the probability of:

a) The sum of the scores is 6 or more

b) The sum of the scores is less than 4

c) The product of the scores is greater than 9

d) The product of the scores is a square number

e) The difference in the scores is exactly 3

4) There are 2 bags of marbles. The first contains 2 red, 3 blue and 1 green, the second contains 1 red, 2 blue and 1 green. A marble from each is removed. Draw a sample space diagram and find the probability of getting:

a) 2 reds

b) 2 blues

c) a red and blue

d) 2 greens

e) a green and a blue

**Sample Space Diagrams AMBER**

1) A tetrahedral dice (four sided) is numbered 3, 4, 5, 6. Two are thrown and the product of the scores noted. Complete the sample space diagram.

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Find the probability that:

a) The score is less than 14 (<14) = \_\_\_\_\_

b) The score is exactly 18 (18) = \_\_\_\_\_

c) The score is an odd number (odd) = \_\_\_\_\_

d) The score is a square number (square) = \_\_\_\_\_

2) Two unbiased dice are numbered 2, 2, 4, 4, 6, 6. They are thrown together and the sum of the two scores is found. Draw a sample space diagram and find the probability that:



a) The sum is 10

b) The sum is an odd number

c) The sum is a square number

d) The sum is greater than 6

3) There are 5 cards numbered 1 to 5. One card is selected at random then replaced in the pack. A second card is then selected at random. Draw sample space diagrams in your book and find the probability of:

a) The sum () of the scores is 6 or more

b) The sum () of the scores is less than 4

c) The product () of the scores is greater than 9

d) The product () of the scores is a square number

e) The difference () in the scores is exactly 3

4) There are 2 bags of marbles. The first contains 2 red, 3 blue and 1 green, the second contains 1 red, 2 blue and 1 green. A marble from each is removed. Draw a sample space diagram and find the probability of getting:

a) 2 reds

b) 2 blues

c) a red and blue

d) 2 greens

e) a green and a blue

**Sample Space Diagrams RED**

1) A tetrahedral dice (four sided) is numbered 3, 4, 5, 6. Two are thrown and the product of the scores noted. Complete the sample space diagram.

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Find the probability that:

a) The score is less than 14 (<14) =

b) The score is exactly 18 (18) =

c) The score is an odd number (odd) =

d) The score is a square number (square) =

2) Two unbiased dice are numbered 2, 2, 4, 4, 6, 6. They are thrown together and the sum of the two scores is found. Draw a sample space diagram and find the probability that:



a) The sum is 10

b) The sum is an odd number

c) The sum is a square number

d) The sum is greater than 6

3) There are 5 cards numbered 1 to 5. One card is selected at random then replaced in the pack. A second card is then selected at random. Draw sample space diagrams in your book and find the probability of:

a) The sum () of the scores is 6 or more

b) The sum () of the scores is less than 4

c) The product () of the scores is greater than 9

d) The product () of the scores is a square number

e) The difference () in the scores is exactly 3

4) There are 2 bags of marbles. The first contains 2 red, 3 blue and 1 green, the second contains 1 red, 2 blue and 1 green. A marble from each is removed. Draw a sample space diagram and find the probability of getting:

Nothing to add or multiply here! Use the letters R, B and G and separate them with commas in your sample space diagram.

a) 2 reds

b) 2 blues

c) a red and blue

d) 2 greens

e) a green and a blue