Probability as a fraction or decimal fraction
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The probability of something happening can be written as a fraction or a decimal fraction.
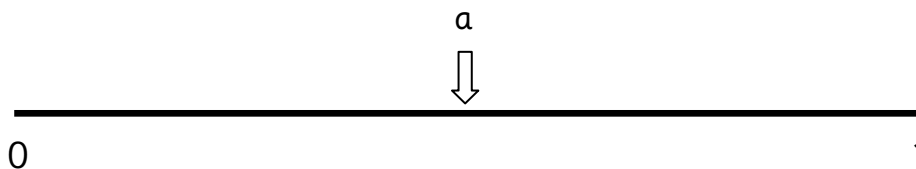
For example: the probability of getting a tail when tossing a coin is ½, but this can also be written as 0.5

Write the probability of the following events happening, both as a fraction and as a decimal fraction.

Round decimals to two decimal places

a. Rolling a 1 to 6 die and getting an even number.

b. Rolling a 1 to 6 die and not getting a 6.

c. Rolling a 1 to 6 die and getting a number larger than 2.

d. Rolling a 1 to 6 die and getting a number between 1 and 6.

e. Rolling a 1 to 6 die and getting a 3 or 4.

f. Picking any spade out of a pack of 52 cards.

g. Picking the ace of spades out of a pack of 52 cards.

h. Picking a card out of a pack of card that is not a heart.

Put each of these events approximately where they would appear on a 0 to 1 probability line to show the order of likelihood. Use the letters of the questions. I have done the first question (a) for you.

a
⇩

0   1

Probability as a fraction or decimal fraction

Answers

All decimals rounded to two decimal places.

a. 3/6 or ½ and 0.5

b. 5/6 and 0.83

c. 4/6 or 2/3 and 0.67

d. 1 and 1

e. 2/6 or 1/3 and 0.33

f. 13/52 or 1/4 and 0.25

g. 1/52 or 0.02

h. 39/52 or ¾ and 0.75

Approximately, but in this order:

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     g              f   e       a         c   h   b           d
     ⇩              ⇩   ⇩       ⇩         ⇩   ⇩   ⇩           ⇩
  ───────────────────────────────────────────────────────────────
  0                                                               1
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