

Worked answers

Level 1

Probability

Non-calculator questions

1. The weather forecast says that, at the top of Ben Nevis at 2pm there is:

- a 20% chance of snow.
- a $\frac{3}{10}$ chance of rain.

Is it more likely to snow or rain?

Show your working.

[2 marks]

Rain: $\frac{3}{10} = 30\%$

Your answer:

Rain

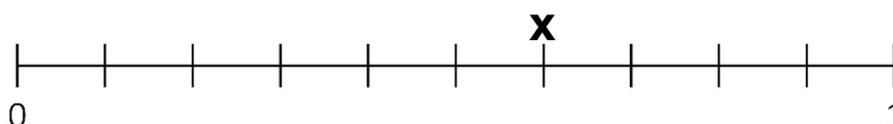
Calculator Questions

2. Natalie knows that only 60% of children at the home where she volunteers can write their name.

She chooses one of the children at random to work with.

On the scale, mark the probability that this child can write their name.

[1 mark]



3. These are the mid upper arm measurements of 20 people.

| | | | | |
|-----|-----|-----|-----|-----|
| 170 | 172 | 158 | 175 | 156 |
| 154 | 162 | 151 | 172 | 186 |
| 158 | 173 | 190 | 174 | 169 |
| 178 | 175 | 157 | 188 | 189 |

What is the probability that one of these people chosen at random has a mid upper arm measurement of less than 160 mm?

Give your answer as a decimal.

[2 marks]

6 out of 20

Simplified to 3 out of 10

Your answer:

0.3

4. John fills a fruit bowl with 6 apples, 4 plums, 5 oranges and 3 pears.

A customer chooses a piece of fruit at random.

What is the probability that they choose a pear?

[2 marks]

18 items of fruit

3 out of 18 are pears

Simplified to 1 out of 6

Your answer:

$\frac{1}{6}$

5. Chester buys a pack of sandpaper sheets with a mixture of grades.

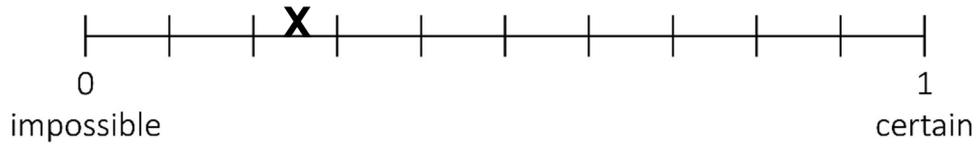
The pack contains 12 coarse grade, 7 medium grade and one fine grade sheets.

Chester takes one sheet out at random.

What is the probability that the sheet Chester picks is medium grade?

Mark the probability on the scale below.

[2 marks]



20 sheets
7 out of 20 chance
35 out of 100 = 0.35