## Ämnesprov, läsår 2014/2015

## Mathematics

## Delprov E

## Årskurs



## I. A survey in Maja's class

The teacher has talked about some animals in Sweden. At the end of the lesson, the teacher asks which of these four animals the pupils like the most.

This is how the pupils in the class answered.

| Animal | Tally | Number |
| :--- | :--- | :---: |
| Fox | H\# I | 6 |
| Elk | III | 4 |
| Seal | II | 2 |
| Bear | HH HH II | 12 |


a) How many pupils answered?

Show your working.
b) Maja has started a bar chart to show the result of the survey.

Mark the $y$-axis (number of pupils) and finish drawing all the bars.

c) Which pie chart shows the result of the survey?

A


B


C



Circle the chart and explain how you reached your answer. You must also show and explain which colour corresponds to each animal.

## II. A survey in Simon's class

The pupils in the class have made surveys.
Simon has investigated how many pets his classmates have.
This is what his table looks like.

| Number of pets | Tally | Frequency |
| :---: | :--- | :---: |
| 0 | I | 1 |
| 1 | HH HH | 10 |
| 2 |  | 0 |
| 3 | HI I | 6 |
| 4 | III | 3 |

a) How many pupils have three pets? Write the answer only.

Answer: $\qquad$
b) Simon, Leo and Amy will work out the mean number of pets per pupil.


Is anyone correct?
Explain and calculate the mean.
c) Two pupils move away, but the mean number of pets does not change. How many pets could each of the two pupils have had?
Show your working.

