# Mathematics Assessment Program College and Career Readiness Mathematics 

## Short Tasks: Interpreting Categorical and Quantitative Data 1

1. Jane collected some red and yellow roses. She measured the lengths of their stems, and drew the following box plots.


Write down the median lengths of both the yellow and red roses to the nearest centimeter.

Which color rose would you buy for a 40 cm tall vase?
2. Bob looked up the value of his car in a users guide, and plotted the value after different numbers of years.
Write a statement about what the graph shows.
3. Aaron, Benjamin and Claude try to see who can make the closest estimate of 30 seconds. One person starts a stopwatch. One of the others tries to guess when 30 seconds has passed and says 'Stop'. The timekeeper writes down the time when the watch is stopped.

Here are the results. All times are given in seconds.

| Aaron's guesses | 31 | 25 | 32 | 27 | 28 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ben's guesses | 37 | 19 | 40 | 36 | 22 |
| Claude's guesses | 32 | 38 | 24 | 32 | 32 |

Using the median, who do you think is best at estimating 30 seconds?
4. A vendor has 15 helium balloons for sale: 9 are yellow, 4 are red, and 2 are green. A balloon is selected at random and sold. If the balloon sold is yellow, what is the probability that the next balloon, selected at random, is also yellow?
5. Joe has a bag containing 8 red sweets, 9 yellow ones and 11 green. Without looking, he takes out a sweet and eats it, then, he takes out a second sweet.

What is the probability that both the sweets are red?

