

answers may vary

1) 4

2) 40%

3) 16

4) 12

5) no

6) Not necessarily. The sample proportion does not have to equal the population proportion. So extrapolating the number of Type A beans from the sample may or may not give the exact answer. This time the numbers were different. And that's OK.

7) 3

8) 30%

9) 12

10) 12

11) yes

12) Not necessarily. The sample proportion does not have to equal the population proportion. So extrapolating the number of Type A beans from the sample may or may not give the exact answer. This time the numbers were the same. That can happen. But it might happen as in the first trial too.

13) The two different samples had two different numbers of Type A beans, so we made different predictions about the total number of Type A beans. No worries. Both were close to the truth.

14) 2

15) 20%

16) 8

17) 14

18) no

19) The sample proportion can only be 0%, 10%, 20%, 30%, etc., up to 100%, since the sample is 10 beans. Thus, our prediction could only be 0 Type A beans, or 4, 8, 12, 16, 20, ..., up to 40. There is no way one could predict 14 Type A beans based on a sample of 10 beans.