a.

Teammate	Available Days
Person 1	15
Person 2	15
Person 3	15
Person 4	15
Person 5	12

Estimate the velocity by taking the available man days of the first 3 members plus the available man days of the 2 new members and multiply it by the focus factor of the last 3-week sprint.

Estimated Velocity = (45 + 27)(.71)

Estimated Velocity ≈ 51.12 Story Points

b.

Since it is a brand-new team, the team does not have an actual velocity therefore we use a focus factor of 70%.

c.

Another potential way to estimate story points would be to place all items from the backlog into a random order on a table or board. The table/board can be scaled small to large and add Fibonacci numbers at the end of the exercise or it could be scaled with the Fibonacci numbers, which would be faster. Your team would then proceed to take turns moving an item up or down the scale. This sequence would repeat until the team agrees that everything is in an agreeable place. This method could be better than planning poker if you have a smaller team, because it can be quicker ordering the items from the backlog. However, with a large group this could take quite some time, considering the amount of items in the backlog would be larger, and there would be more disagreements.