✓ **Congratulations! You passed!**

TO PASS 80% or higher

[Keep Learning]

GRADE
100%

Release Planning and Tracking

TOTAL POINTS 10

1. Calculate the **velocity range** a team should use to select work for next iteration based on their past velocities (see chart below). The team uses the last 5 iterations to estimate their velocity. **Use format "from-to" to specify the answer (e.g., 0-100).**

   2 / 2 points

   Table 1: The velocity of previous iterations

Iteration	Story points completed
1	14
2	18
3	23
4	17
5	15
6	21
7	22
8	20

   15-22

   ✓ **Correct**
   Since there are no anomalies, the velocity range is the minimum velocity to the maximum velocity of the last 5 iterations (iterations 4 to 8).

2. A team was doing release planning and they decided that the next release will include all stories from **Story 1 to Story 11** (see table 2 below).

   4 / 4 points

   - The **velocity** range to be used for the release planning is **15-22**.
   - The team works in a **2 week iteration**.
   - It costs about **$50,000 per iteration** to fund the entire team.

   Calculate the estimated duration for next release. Additionally, how much will this release cost?

   Table 2: Prioritized Product Backlog

Story Title	Estimate (in ideal days)
Story 1	5
Story 2	5
Story 3	8
Story 4	3
Story 5	5
Story 6	5
Story 7	3
Story 8	5
Story 9	8
Story 10	8
Story 11	3
Story 12	3
Story 13	3
Story 14	5
Story 15	8
Story 16	3
Story 17	5
Story 18	5
Story 19	8
Story 20	8

   ⦿ Duration: 6-8 weeks, Cost: 150K to 200K
   ○ Duration: 3-4 weeks, Cost: 150K to 200K
   ○ Duration: 10-14 weeks, Cost: 500K to 700K
   ○ Duration: 6-8 weeks, Cost: 300K to 400K

   ✓ **Correct**
   Total estimate of stories from S1 to S11 = 58

   With velocity 15, it will take 58 / 15 => 4 iterations => 8 weeks

   With velocity 22, it will take 58/22 => 3 iterations => 6 weeks

   So duration is 6-8 weeks

   Since it costs $50K per iteration, it will cost between:

   $50K * 3 iterations = $150K and $50K * 4 iterations = $200K

3. Select scenarios below where the team used the **correct approach to handle** special cases of team velocity...

2 / 2 points

3. Select scenarios below where the team used the **correct approach to handle** special cases of team velocity.

4 / 4 points

☑ To forecast velocity for first iteration,

    1) the team builds deeper understanding of few stories from the backlog

    2) From the understood stories, they select stories they feel they can get done in one sprint.

    3) The sum the estimates of the selected stories is the team's forecasted velocity.

> ✓ **Correct**
>
> Correct. This is a decent strategy for forecasting velocity.

☐ A new team member is going to join the team in the next iteration, so the team adjusted their velocity appropriately and selected more work to do in the iteration

☐ The team is getting more defects / support work so they are not able to finish the stories selected for the current sprint. The team estimated that it takes 30% of team capacity to handle support work. The team decided to reduce velocity by 30% and use it for future iteration.

☑ One of the team members is taking a couple days off in next iteration, but the team didn't adjust its velocity to reflect that.

> ✓ **Correct**
>
> Correct. Since we don't know the exact impact of a team member taking some time off and there will always be somebody taking a couple days off, let the velocity take care of it.

4. Which of the following methods can help you track a release? (select any 2)

2 / 2 points

☑ A cumulative flow diagram for a release

> ✓ **Correct**
>
> True. A cumulative flow diagram (if it only includes stories for the release) shows the progress (completed stories) against the total amount of work, so it can help track a release. In addition, it can help you understand story lead and cycle times.

☑ A release burn-up chart

> ✓ **Correct**
>
> True. A release burn-up chart shows the progress (work done) against the total amount of work in a release.

☐ An iteration burn-down chart

☐ A weekly status report