Congratulations! You passed!

Grade received 90%
Latest Submission Grade 90%
To pass 80% or higher

Matrices

Quiz • 30 min

Due Mar 19, 11:59 PM GMT

1. On your next mission, while collecting rock samples, you observe a new crystal structure containing carbon, which could be key to life! You utilize the third spacecraft, Ingenuity, and meticulously collect enough rock samples to distribute within the weight limits of each spacecraft. **1 / 1 point**

To Pass 80% or higher

You place 2 basalt samples, 1 meteorite, and 5 crystal rock samples into the Perseverance rover, which all weigh 20 grams.

Your grade

90%

You then distribute 1 basalt, 2 meteorites, and 1 crystal into the Curiosity rover, with a weight of 10 grams in total.

We keep your highest score

Lastly, you place 2 basalt samples, 1 meteorite, and 3 crystals to Ingenuity, which together weigh 15 grams. Each rock sample is represented with variables b for basalt, m for meteorite, and c for crystal structures.

Which of the following systems of equations represents the correct information in the above system of sentences?

- $\begin{cases} 2b + m + 5 = 20 \\ b + 2m + c = 10 \end{cases}$
- $\begin{cases} m + 2b + 5 = 20 \\ 2b + m + c = 10 \\ b + 2m + 3c = 15 \end{cases}$
- $\begin{cases} 2b + m + 5c = 20 \end{cases}$