

Luna's Space Adventure

Name _____

Grade 4 • Multi-step problems • 4.OA.A.3

Date _____



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Multi-step stories

Decide what the remainder means in each story.

- 1 Nova buys 4 bags of space snacks with 5 in each bag, then gives 13 space snacks to Orion. How many space snacks does Nova have left?
_____ space snacks
- 2 Max puts 18 comet crystals into baskets of 5. How many comet crystals are left over after filling as many baskets as possible?
_____ comet crystals
- 3 23 children are going on a trip. Each van holds 3 children. How many vans are needed so everyone can go?
_____ vans
- 4 Luna buys 3 jars of star stickers with 4 in each jar, then gives 6 star stickers to Max. How many star stickers does Luna have left?
_____ star stickers
- 5 Max puts 41 star stickers into jars of 5. How many star stickers are left over after filling as many jars as possible?
_____ star stickers

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ANSWER KEY



Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Multi-step stories Decide what the remainder means in each story.

- ① Nova buys 4 bags of space snacks with 5 in each bag, then gives 13 space snacks to Orion. How many space snacks does Nova have left?

$$4 \times 5 = 20, \text{ then } 20 - 13 = 7$$

7 space snacks

- ② Max puts 18 comet crystals into baskets of 5. How many comet crystals are left over after filling as many baskets as possible?

$$3 \times 5 = 15, \text{ then } 18 - 15 = 3$$

3 comet crystals

- ③ 23 children are going on a trip. Each van holds 3 children. How many vans are needed so everyone can go?

$$7 \times 3 = 21, \text{ then } 7 + 1 = 8$$

8 vans

- ④ Luna buys 3 jars of star stickers with 4 in each jar, then gives 6 star stickers to Max. How many star stickers does Luna have left?

$$3 \times 4 = 12, \text{ then } 12 - 6 = 6$$

6 star stickers

- ⑤ Max puts 41 star stickers into jars of 5. How many star stickers are left over after filling as many jars as possible?

$$8 \times 5 = 40, \text{ then } 41 - 40 = 1$$

1 star stickers

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GUIDE

1 What this sheet practises

Story problems that take more than one step, including division with a remainder. Your child decides what the remainder means: some left over, or one more group needed.

2 A problem from the sheet, worked out

Multi-step stories Decide what the remainder means in each story.

- 1 Nova buys 4 bags of space snacks with 5 in each bag, then gives 13 space snacks to Orion. How many space snacks does Nova have left?

$$4 \times 5 = 20, \text{ then } 20 - 13 = 7$$

7 space snacks

How: Work out the first step, then use its answer in the next. With a remainder, reread the question: it may ask what's left over, or how many groups are needed so no one is left out.

3 Words to know

remainder what's left after making equal groups

multi-step needing more than one calculation

estimate a close guess to check an answer

equation a number sentence with an equals sign

4 Watch for

- Answering a van story with the quotient, when one more van is needed for the rest.
- Giving the number of full packs when the question asks what's left over.
- Stopping after the first step.

5 Where it fits

BEFORE

3.OA.D.8

Solve two-step story problems using all four operations.

THIS SHEET

4.OA.A.3

Solve multi-step story problems, including ones with remainders.

NEXT

5.OA.A.2

Write and read simple expressions without working them out.

6 Helping at home

Plan something real: 26 people and cars that hold 4 each. How many cars? Talk about why 6 cars isn't enough.