**Cognitively Guided Instruction  
Remainders in Division**

**Use the division problem 46 ÷ 4 to write four story problems with these answers.**

|  |  |
| --- | --- |
| **Answer** | **Story Problem** |
| **11** |  |
| **2** |  |
| **12** |  |
| **11½** |  |

**Remainders in Division**

“In solving problems with remainders, it is necessary to take into account how the remainder relates to the problem. The context of the problem generally dictates how the remainder is treated in answering the question” (Carpenter, Fennema, Franke, Levi, & Empson, 1999, p.43).

Carpenter, T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S. B. (1999). *Children's mathematics: Cognitively guided instruction*. Portsmouth, NH: Heinemann and National   
 Council of Teachers of Mathematics. \*Revised in 2015

What to do with what’s left over:

* Increase the answer to include the remaining part.
* Discard the leftovers.
* The remainder is the answer to the problem.
* Include the remainder in the answer as a fractional part.

What’s the answer? 25 ÷ 7

1. I have $25. Each plant costs $7. How many plants can I buy?

2. On a field trip, we plan to take 1 adult per 7 children. If 25 children are going on the trip, how many adults should go?

3. A trip from Washington to Georgia took 25 days. How many weeks did the trip take?

4. A student earned $25 for 7 hours of work. How much did the student earn per hour?

“We must consider problem *in context*.” -Peter Hilton