

Story Problems (Activity 1)

What models can be used to represent and solve addition and subtraction problems?

We will pose a story problem with a progression of number choices. For each number choice, consider one or more of the following as a way to represent your solution to the problem:

- counters
- 5/10 frames
- Rekenrek
- base 10 blocks
- 100 board
- open number line

Story Problem 1

Carl has ____ blocks. Rita gives him _____ more blocks. How many blocks does Carl have now?

(2, 3) (7, 4) (6, 7) (12, 10) (20, 23) (44, 38)

Story Problem 2

_____ penguins were standing on the iceberg. _____ jumped into the water to swim. How many penguins are left on the iceberg?

(5, 4) (15, 7) (30, 20) (50, 18) (86, 26) (83, 27)



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Is a number an adjective or a noun? How do you know?

Complete the following equations to make each statement true. (there may be more than one correct answer.)

For example: $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 11$ could be **1dime + 1 penny = 11 cents**

1. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 8 \underline{\hspace{1cm}}$

2. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 25 \underline{\hspace{1cm}}$

3. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 4 \underline{\hspace{1cm}}$

4. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 30 \underline{\hspace{1cm}}$

5. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 5 \underline{\hspace{1cm}}$

6. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 15 \underline{\hspace{1cm}}$

7. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 205 \underline{\hspace{1cm}}$

8. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 40 \underline{\hspace{1cm}}$

9. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 49 \underline{\hspace{1cm}}$

10. $1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} + 1 \underline{\hspace{1cm}} = 37 \underline{\hspace{1cm}}$

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Ways to Differentiate Problems

Problem Type

- Joining Stories (also called "Add To")
- Separating Stories (also called "Take From")
- Part, Part Whole Stories (also called "Put Together, Take Apart")
- Comparing Stories

Location of the unknown

- Result-unknown
- Change-unknown
- Start-unknown

Number Choices



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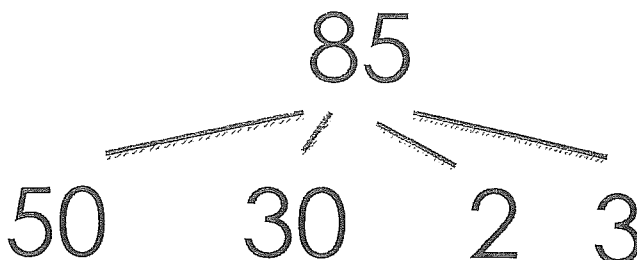
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Decomposing Numbers

Directions:

- Decompose the number 85 as many ways as possible. An example is shown below.



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