

Clues for Problem Solving Detectives



1. Read the problem (case) and search for clues:

Jesse had \$3 more than Clinton. Clinton had \$10.
How much money do they have altogether?

2. Rewrite the question as a complete sentence, leaving space for the answer.

"Clinton & Jesse had _____ altogether."



3. Identify the who **and** the what clues by circling them.

Jesse had \$3 more than Clinton. Clinton had \$10.
How much money do they have altogether?

4. Draw a unit bar for each variable (or clue) in order.

Jesse's money

Clinton's money



5. **Model** your investigative skills by following these steps:
A. Re-read the problem in small chunks.
B. Adjust the unit bars to match the info in each chunk.
C. Fill in a ? (are you solving for a part **or** the whole?).

Jesse's money

10	3
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Clinton's money

10

} ?

6. Use **numbers** to solve the problem (case).

$$\text{\$10} + \text{\$10} + \text{\$3} = 23 \text{ total}$$

$$\text{OR } \text{\$20} + \text{\$3} = \text{\$23 total}$$

$$\text{OR } (\text{\$10} \times 2) + 3 = 23 \text{ total}$$



7. Use **words** to describe the answer in a sentence. Case closed!

"Clinton & Jesse had \\$23 altogether."



Questions to ask during the investigation:

- Who is involved in this situation?
- What do they want me to find out?
- Will I be comparing anything?
- Am I searching for a part or the whole thing?
- What kind of model should I draw as I gather clues?
 - Do I need one long bar for all people involved **OR** one short bar for each person?
 - Do I need one long unit bar to model the parts of the whole **OR** should I use different unit bars because there is a comparison?
 - Adding & multiplying most often use short bars and subtraction & division mostly use long bars.

Different types of models:

