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Basic Instructions

Carefully analyze each set of clues to find the value of each letter in the chart. Then use the letter values to solve the cryptogram (code) to discover the classic joke.

Start with the most obvious clues and then deduce less obvious associations until all the letter values are identified. We recommend using + for true and – for false on each chart to keep it simple. However, many other notation strategies can be used.

Please note the bolded underscores in the classic joke (answer) means a capital letter should be used.

Teaching Suggestions

If students become stumped or frustrated, help them find an answer, but refrain from giving them the answer. Instead, try to help your students find the reasoning process that leads them to the answer.

Group problem-solving (when this option is available) is another popular way to solve these puzzles. It can also be used to help students through a difficult problem or section of a problem.

Have fun and remember to praise a student's perseverance.

Symbols Used in the Clues

- # number< less than> greater than
- = equals

- ≠ does not equal
- ≤ less than or equal to
- ≥ greater than or equal to

- + plus
- minus
- × multiply ÷ divide

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Activity 25

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the classic joke.

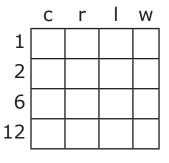
$$f > 3.5 + 5.5$$

 $f - 3 > e > i$

| | n | е | i | f |
|----|---|---|---|---|
| 5 | | | | |
| 7 | | | | |
| 9 | | | | |
| 11 | | | | |

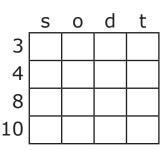
$$(c \div 4) + 11.5 = w$$

r × c < l × c



$$o > (d + t) + 1$$

 $s > (d + t)$
 $d < t$



$$d = \underline{\hspace{1cm}}$$

Cryptogram (Parentheses separate double digits; they have no other meaning.)