Name

## Collection

 ofProblems \#3

Label the dots.

$+8$

Complete.

$$
\begin{aligned}
& 38-16=\square \\
& 39-17=\square \\
& 40-18=\square \\
& 41-19=\square \\
& 42-\square=22 \\
& 45-\square=22 \\
& 47-\square=22 \\
& 57-\square=22
\end{aligned}
$$

Label the dots. There are many possibilities.


Put any numbers you wish on the Minicomputer with exactly four regular checkers. One solution is given for you.

$=$

$=$

$=$

$=$

Draw as many +10 arrows as possible in this picture. One arrow is drawn for you.


Put these numbers in the blanks so that the story makes sense.


In the United States, there are population greater than $\qquad$ . The state with the most such cities is California with $\qquad$ .Texas is second with $\qquad$ (more than 10). There are states with no such city.

Fill in the boxes.

| $\begin{array}{r} 8 \\ 8 \\ 8 \\ +88 \\ \hline \square \\ \hline \end{array}$ $4 \times 8=$ | $\begin{array}{r} 80 \\ 80 \\ 80 \\ +80 \\ \hline \square \\ \hline \end{array}$ $4 \times 80=$ | $\begin{array}{r} 800 \\ 800 \\ 800 \\ +800 \\ \square \square \\ 4 \times 800= \end{array}$ |
| :---: | :---: | :---: |
| $6 \times 7=$ | $\begin{array}{r} 70 \\ 70 \\ 70 \\ 70 \\ 70 \\ +70 \\ \hline \square \\ \hline \square 70= \end{array}$ | $\begin{array}{r} 700 \\ 700 \\ 700 \\ 700 \\ 700 \\ +700 \\ \hline \square \\ 6 \times 700= \end{array}$ |

Fig is a secret number.

## Clue 1

Fig can be put on this Minicomputer board using one (0-checker only.


Fig could be $\qquad$ , $\qquad$ , $\qquad$ , or $\qquad$ .

## Clue 2

Fig is on the +6 arrow road that meets the number 8.


Fig could be $\qquad$ or $\qquad$ .

## Clue 3

Who is Fig? $\qquad$

Complete the calculations.

$$
\begin{array}{r}
236 \\
384 \\
+\quad 192 \\
\hline
\end{array}
$$

$$
\begin{array}{r}
170 \\
-\quad 98 \\
\hline
\end{array}
$$

$$
805
$$

$$
-549
$$

$$
\begin{array}{r}
195 \\
+\quad 437
\end{array}
$$

$$
\begin{array}{r}
219 \\
+\quad 566
\end{array}
$$

$$
\begin{array}{r}
83 \\
\times \quad 5 \\
\hline
\end{array}
$$


$7 \times \square=28$
$28 \div 7=\square$
$6 \times \square=36$
$36 \div 6=\square$

The length of each line segment in this honeycomb is 1 cm . Find the perimeter of each shape and record it in the box of the same color.


Can you color a shape with perimeter 20 cm ? $\qquad$ Explain.

Can you color a shape with perimeter 15 cm ? $\qquad$ Explain.

Put each number on the Minicomputer using exactly one regular checker and one negative checker.


Label the dots. Draw as many +8 arrows as possible in the picture.


Are there seven +8 arrows in your picture?

## PUNCH RECIPE

## 4 liters of ginger ale <br> 2 liters of lemonade <br> 1 liter of orange juice <br> (serves about 20 people)

Anna wants to serve this punch at a party to which 60 people have been invited.
How much ginger ale should she buy? $\qquad$ liters How much lemonade? $\qquad$ liters How much orange juice? $\qquad$ liters


Each red shape is a rectangle, but part of each is covered. What is the area of each rectangle? What is the perimeter of each rectangle?


| Area |
| ---: |
| $\mathrm{cm}^{2}$ |
| Perimeter |
| cm |




| Area |
| ---: |
| $\mathrm{cm}^{2}$ |
| Perimeter |
| cm |

Complete.

$=3 \times$

$=4 \times$

$\longrightarrow \longrightarrow \square$

$=\widehat{2}$
$\times$

$=3 \times$


## Draw a line segment that is parallel to the red line segment and that crosses the blue segment.



Label the dots on this zigzag number line.


72 is a multiple of 6 ; 72 is also a multiple of 8 . List all the multiples of 6 between 52 and 92.

List all the multiples of 8 between 52 and 92 .

28 is the greatest number in each picture. Find and label the dot for 28 . Then label the other dots.


Complete.

$$
\begin{aligned}
& \frac{1}{2} \times 24= \\
& \frac{1}{2} \times 34= \\
& \frac{1}{2} \times 44= \\
& \frac{1}{2} \times 54= \\
& \frac{1}{2} \times 64= \\
& \frac{1}{2} \times 74= \\
& \frac{1}{2} \times 84= \\
& \frac{1}{2} \times 184= \\
& \frac{1}{2} \times 194=
\end{aligned}
$$

Monica receives \$20 each month for her allowance. She made this picture to show how she usually spends her allowance.


How much does Monica put in savings each month? $\qquad$ How much does Monica spend each month on
games? $\qquad$
snacks? $\qquad$
other?

In one year, what amount does Monica put in savings?

Jim is playing in some of Sasquatch's tracks. The red arrows are for his steps. Jim takes four steps to get to Sasquatch's next step. Label the dots.


How many steps does it take Jim to reach Sasquatch's 5th step? $\qquad$
What is another way we could label the mark for 5 ?

How many steps does it take Jim to reach Sasquatch's
7th step?
What is another way we could label the mark for 7 ?

Put an operation (,,$+- x$, or $\div$ ) in each box to make true number sentences.

$$
\begin{aligned}
& (25 \square 35) \square 15=45 \\
& 20 \square(16 \square 2)=12 \\
& (12 \square 6) \square 28=100 \\
& (36 \square 10) \square \quad 4=104 \\
& 328 \square(13 \square 6)=250 \\
& (475 \square 256) \square 341=390 \\
& (50 \square 10) \square 12=60
\end{aligned}
$$

Fill in the boxes for the arrows and answer the questions.


What number is halfway between 3 and 11 on the number line? $\qquad$


What number is halfway between $\hat{7}$ and 5 on the number line? $\qquad$

June

| $\mathbf{S}$ | $\mathbf{M}$ |  |  |  | $\mathbf{T}$ | $\mathbf{w}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{I}$ | 2 | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 |  |  |  |


| S | July |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m | T | w | T | F | S |
|  |  |  |  | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| II | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

Dan is a camp director. He wants to set up four-day camp sessions during the months of June and July. No two sessions can overlap, and Dan cannot use July 3, 4, or 5 as camp days. What is the most number of sessions Dan can schedule?

Using a ruler, measure each line segment and record its length in centimeters. Put a dot at the middle of each line segment. One is done for you.


## cm



20 and 24 are in this picture. Locate 20 and 24, and then label all the dots.



In this tile design, there is a red tile in the center.
The first layer of tiles surrounding it is white. How many tiles are there in the first layer?
How many tiles are in the second layer (blue)?
in the third layer (red)? $\qquad$
in the fourth layer (white)? $\qquad$
in the fifth layer (blue)?
If the pattern were continued, how many tiles would be in the sixth layer?
in the tenth layer? $\qquad$

Put these numbers in the arrow picture.
2.34
2.4
2.07
3
is less than
$\xrightarrow{2}$


Jane and Robert rake leaves for their neighbor one Saturday. Jane works 2 hours and Robert works 3 hours. If they are paid $\$ 10$ altogether, how much should each receive? Explain.

Jacob wants to cut a piece of wood 75 cm long into two pieces. He needs one piece to be twice as long as the other. How long should each piece be? Explain.


Label the dots.


$$
+36
$$



3x

## Tuf is a secret number.

## Clue 1

Tuf is on the +4 arrow road that meets the number 1 .


Clue 2
Tuf can be put on this Minicomputer with exactly one (10)-checker and one regular checker.

(10)

Tuf could be $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ , or $\qquad$ .

Clue 3


Who is Tuf? $\qquad$

