

Ambrose

Name Ambrose

Cookie Problem

Directions: Solve the following problem in any manner that you choose. Please include the full solution below along with an explanation of your solution.

Tim ate 100 cookies in 5 days. Each day he ate 6 more than the day before. How many cookies did he eat on the first day?

$100 \div 5 = 20$ If he were to eat 20 in 5 days
It would equal 100.
 $6 \times 5 = 30$ 30 additional cookies in 5 days
 $100 - 30 = 70$ how many cookies he would have eaten
if he never added the 6s
 $70 \div 5 = 14$ Therefore he probably ate 14 on the
first day

14 day 1
20 day 2
26 day 3
32 day 4
38 day 5

100

7
13
19
25
31

95

8
14
20
26
32

100

Started
with
8

Monica

Name Monica

Cookie Problem

Directions: Solve the following problem in any manner that you choose. Please include the full solution below along with an explanation of your solution.

Tim ate 100 cookies in 5 days. Each day he ate 6 more than the day before. How many cookies did he eat on the first day?

$$N + 6N + 6N + 6N + 6N = 100$$

$$\begin{array}{r} 25 \\ 25 \\ \hline 25 \end{array} N = 100$$
$$N = 4$$

$$\begin{array}{r} 6N = 6 \cdot 4 = 24 \\ \times 4 \\ \hline 96 \\ + 4 \\ \hline 100 \end{array}$$

The Cookie Problem

Guess And Check

Todd ate one hundred cookies in five days. Each day he ate six more than he did the day before. How many cookies did he eat on the first day?

$$\begin{array}{r} 100 = 5n + 6 \\ - 6 \quad 5 \\ \hline 94 \end{array}$$

$$\begin{array}{r} 100 = 5n + 6 \\ - 6 \\ \hline 94 = 5n \end{array}$$

$$\begin{array}{r} 100 = 5(6) + n \\ - 30 \quad 30 \\ \hline 70 = n \end{array}$$

HE ATE
TEN COOKIES
ON THE 1st day

$$\begin{array}{r} 100 = 5n + 6 \\ - 5 \quad 6 \\ \hline 95 \end{array}$$

$$\begin{array}{r} 100 = 5n + 6 \\ - 6 \\ \hline 94 \end{array}$$

$$100 = 5n$$

Attiba Cont'd

$$100 = 5 \text{ days}$$

M T W T F
6 12 18 24 30

$$100 = 5 \text{ days} + 36$$

$$\begin{array}{r} 12 \\ + 6 \\ \hline 18 \\ + 12 \\ \hline 30 \\ + 18 \\ \hline 48 \\ + 24 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 10 \\ + 6 \\ \hline 16 \\ + 18 \\ \hline 34 \end{array}$$

$$\begin{array}{r} 12 \\ + 6 \\ \hline 18 \\ + 12 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 50 \\ + 6 \\ \hline 56 \\ + 12 \\ \hline 68 \\ + 18 \\ \hline 86 \end{array}$$

$$\begin{array}{r} 36 \\ + 6 \\ \hline 42 \\ + 12 \\ \hline 54 \\ + 18 \\ \hline 72 \\ + 24 \\ \hline 96 \end{array}$$

100

Kailin

The Cookie Problem

Todd ate one hundred cookies in five days. Each day he ate six more than he did the day before. How many cookies did he eat on the first day?

day before. How many cookies did he eat on the first day?

100 cookies 5 days

He ate 6 more than the day before

M T W T F
1 2 3 4 5 6 last
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

$$8 + 5 \times 6 = 100$$

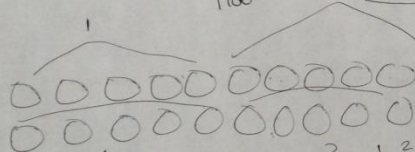
$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \\ + 6 \end{array}$$

$$\begin{array}{r} 6x \div 5 = 100 \\ 5 \quad 5 \\ \hline 25 \end{array}$$

$20 + 6x = 100$
 $20 \qquad 20$

 $\frac{6x}{6} \quad \frac{80}{6}$
 $2 \quad x = 20$

$$\begin{array}{r} 46 \\ 58 \\ \hline 104 \\ 132 \\ \hline 236 \end{array}$$



$$MTWTF = 100$$

12345
13 14 30 48 72

$$\frac{20}{5100} \frac{10}{0}$$

$\frac{12345}{2345678910}$
 $\frac{14}{14} \div$

$$\begin{array}{r} 6 \times 5 = 100 \\ \hline 1.5 \quad 25 \\ \hline 22 \quad 5 \quad 20 \\ 23 \quad 0 \\ \hline 20 \\ \hline 120 \end{array}$$

$$\begin{array}{r} 13 \\ \times 2 \\ \hline 26 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times 3 \\ \hline 54 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline 8 \\ \hline \end{array}$$

M T W T F

6	6	6	6	6
	6	6	6	6
		6	6	6
			6	6
				6

$$6x + 5 = 166$$

$$\begin{array}{r} 5c + 60 = 100 \\ - 60 - 60 \\ \hline 5c = 40 \\ \frac{5c}{5} = \frac{40}{5} \end{array}$$

$$\begin{array}{r} 6 \ 12 \ 18 \ 24 \ 30 \\ 12 \ 18 \ 24 \ 30 \ 36 \end{array}$$

$$\begin{array}{r} 12 \\ + 2 \\ \hline 14 \\ 20 \\ 26 \\ 32 \end{array}$$

8 Fast day

14

20

26

32

100

18

72

12

84

90

$$\begin{array}{r} 36 \\ 30 \\ \hline 66 \\ 24 \\ \hline 90 \\ 18 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 6 \times 5 = 100 \\ \underline{5 \quad 5} \\ 1 \quad 75 \\ \underline{6} \end{array}$$

[illegible]

Elda

Handwritten mathematical work on a piece of paper, featuring various calculations and notes.

Top Left: A vertical list of numbers: 124, 80, 0, 3, 6, 10. Below it, the text "5 days" is written.

Top Center: A small calculation: $\frac{20}{51 \frac{100}{5}}$.

Top Right: The number "20" is written.

Middle Left: A list of days: "Monday", "Tuesday", "Wednesday", "Thursday", "Friday". To the right of these days are several "20" values and a calculation: $\frac{20}{26} = \frac{20}{32}$.

Middle Center: A calculation: $\frac{20}{26} = \frac{20}{32}$. Below it, a larger calculation: $\frac{20}{26} = \frac{20}{32}$.

Middle Right: A calculation: $\frac{20}{26} = \frac{20}{32}$. Below it, a larger calculation: $\frac{20}{26} = \frac{20}{32}$.

Bottom Left: A calculation: $\frac{20}{26} = \frac{20}{32}$. Below it, a larger calculation: $\frac{20}{26} = \frac{20}{32}$.

Bottom Center: A calculation: $\frac{20}{26} = \frac{20}{32}$. Below it, a larger calculation: $\frac{20}{26} = \frac{20}{32}$.

Bottom Right: A calculation: $\frac{20}{26} = \frac{20}{32}$. Below it, a larger calculation: $\frac{20}{26} = \frac{20}{32}$.