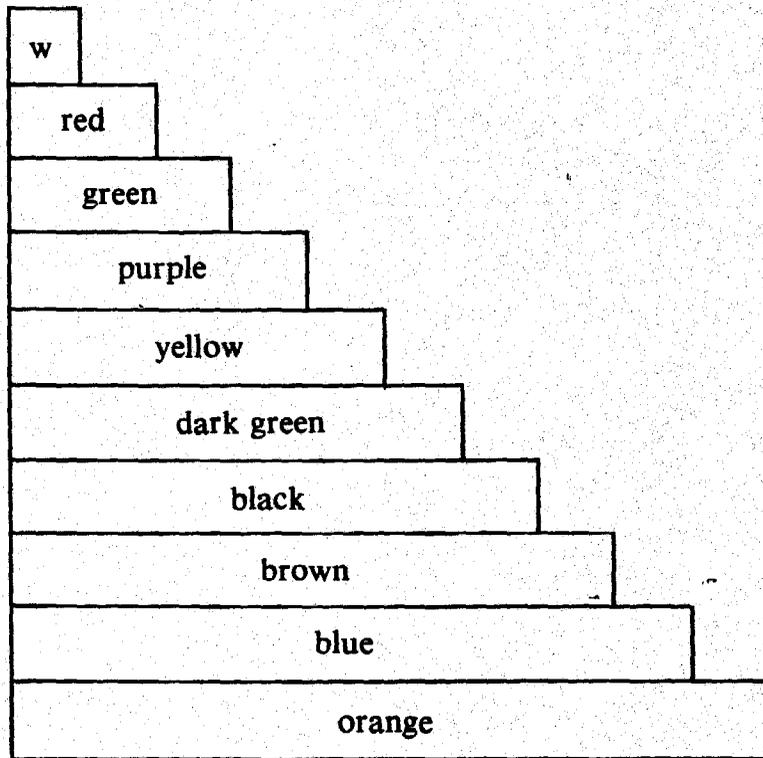
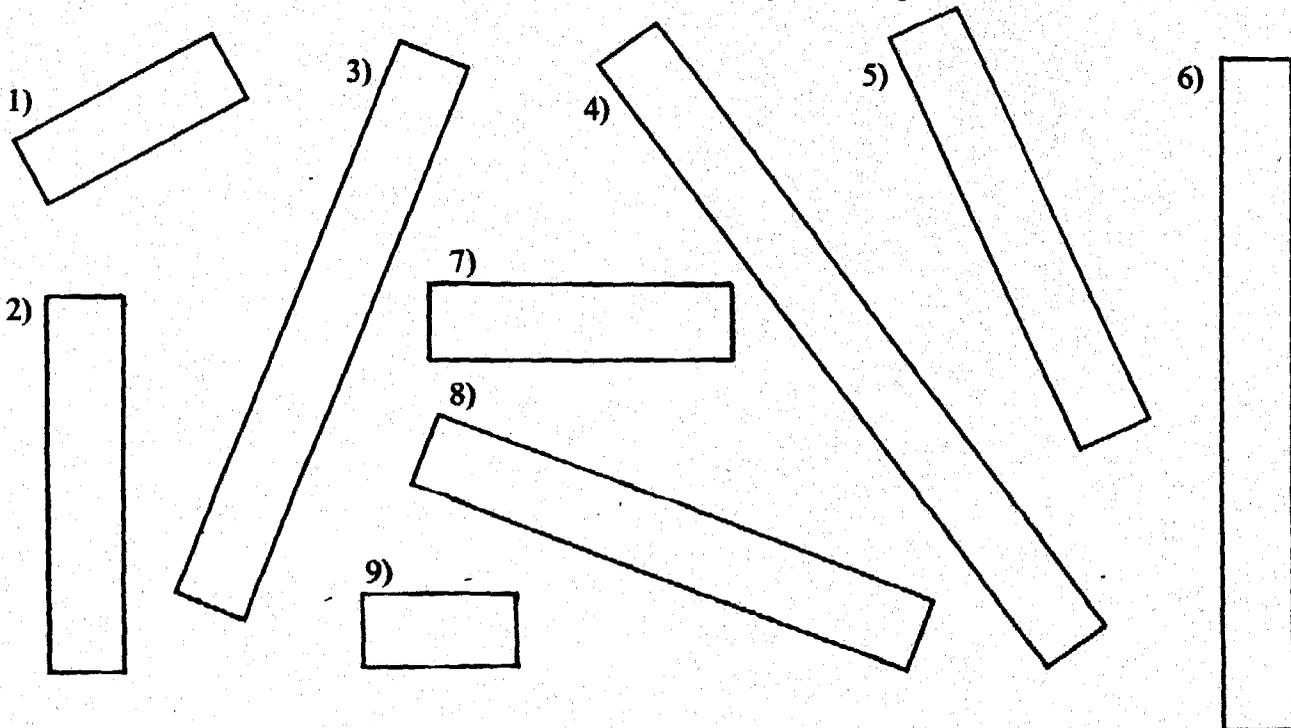


Rod Color Names

Cover the staircase with the rod that fits each space.



Predict the color of the rod which fits each drawing below.
Write the color name on each rod picture and check by covering with that colored rod.



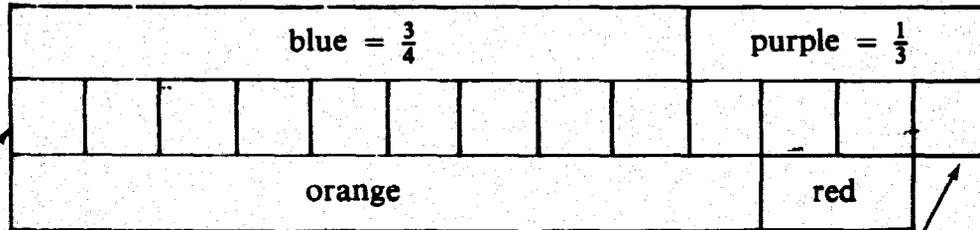
Addition Problems With Sums Greater Than One

w	w	w	w	w	w	w	w	w	w	w	w
orange										red	
dark green					dark green						
purple			purple				purple				
green		green			green			green			
red		red		red		red		red		red	

When fractions are added, the answer (sum) may be greater than one.

Example:

$$\begin{array}{r} \frac{3}{4} = \frac{9}{12} \\ + \frac{1}{3} = \frac{4}{12} \\ \hline \frac{13}{12} \end{array}$$



$\frac{13}{12}$ is the same as 1 whole and $\frac{1}{12}$ more.

The mixed number for $\frac{13}{12}$ is written as $1\frac{1}{12}$.

Solve the following addition problems using a common denominator. Convert your answer to a mixed number. Check by using rods.

$$\begin{array}{r} 1) \frac{7}{12} = \text{rod} \\ + \frac{5}{6} = \text{rod} \\ \hline \text{rod} \end{array}$$

or

$$\begin{array}{r} 2) \frac{3}{4} = \text{rod} \\ + \frac{2}{3} = \text{rod} \\ \hline \text{rod} \end{array}$$

or

$$\begin{array}{r} 3) \frac{5}{12} = \text{rod} \\ + \frac{2}{3} = \text{rod} \\ \hline \text{rod} \end{array}$$

or

$$\begin{array}{r} 4) \frac{5}{6} = \text{rod} \\ + \frac{3}{4} = \text{rod} \\ \hline \text{rod} \end{array}$$

or

Mixed Numbers _____

More Subtraction With Rods

Cover the diagram below with rods to show the fractional parts of brown.

w	w	w	w	w	w	w	w
brown							
purple				purple			
red		red		red		red	

Use your rods to do each subtraction problem. Write the rod sentence on the blank lines below the problem. Write your fraction answers in the s. Put your answers in lowest terms.

1) $\frac{1}{2}$ - $\frac{1}{4}$ =  or 
 _____ - _____ = _____ or _____

7) $\frac{7}{8}$ - $\frac{1}{4}$ = 
 _____ - _____ = _____

2) $\frac{1}{2}$ - $\frac{1}{8}$ = 
 _____ - _____ = _____

8) $\frac{7}{8}$ - $\frac{3}{4}$ = 
 _____ - _____ = _____

3) $\frac{3}{4}$ - $\frac{1}{2}$ =  or 
 _____ - _____ = _____ or _____

9) $\frac{5}{8}$ - $\frac{1}{4}$ = 
 _____ - _____ = _____

4) $\frac{3}{4}$ - $\frac{1}{8}$ = 
 _____ - _____ = _____

10) $\frac{3}{4}$ - $\frac{5}{8}$ = 
 _____ - _____ = _____

5) $\frac{3}{8}$ - $\frac{1}{4}$ = 
 _____ - _____ = _____

11) 1 - $\frac{1}{4}$ =  or 
 _____ - _____ = _____ or _____

6) $\frac{5}{8}$ - $\frac{1}{2}$ = 
 _____ - _____ = _____

12) 1 - $\frac{3}{8}$ = 
 _____ - _____ = _____

More Records Of One-Color Trains with Fraction Sentences

Make all the one-color trains for each rod or rod combination. Complete the record by listing the color of each train, the number of rods needed to make it, and the fraction sentence suggested by that train.

Example:

blue								
green			green			green		
w	w	w	w	w	w	w	w	w

Record		
Color of train	Number of rods	Fraction sentence
a) green	3	$\frac{1}{3}$ of blue = <u>green</u> .
b) white	9	$\frac{1}{9}$ of blue = <u>white</u> .

1)

orange									
yellow					yellow				
red	red	red	red	red	red	red	red	red	red
w	w	w	w	w	w	w	w	w	w

Record		
Color of train	Number of rods	Fraction sentence
a)		$\frac{\quad}{\quad}$ of orange = _____.
b)		$\frac{\quad}{\quad}$ of orange = _____.
c)		$\frac{\quad}{\quad}$ of orange = _____.

2)

orange	red
Build one-color trains here.	

Record		
Color of train	Number of rods	Fraction sentence
a)		$\frac{\quad}{\quad}$ of (orange & red) = _____.
b)		$\frac{\quad}{\quad}$ of (orange & red) = _____.
c)		$\frac{\quad}{\quad}$ of (orange & red) = _____.
d)		$\frac{\quad}{\quad}$ of (orange & red) = _____.
e)		$\frac{\quad}{\quad}$ of (orange & red) = _____.