

DUE \_\_\_\_\_

HW #5

NAME

Key

FEEDBACK FROM TEACHER:

SHOW WORK PLEASE

NEATER PLEASE

WRITE TIME SPENT

PLEASE CORRECT

LEVEL 3 \_\_\_\_\_ (✓, v+, or v++)

TIME SPENT: \_\_\_\_\_

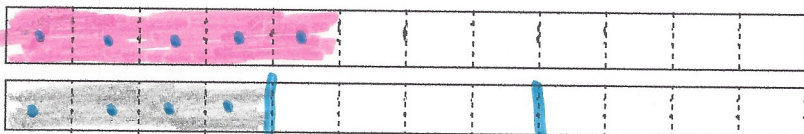
Student feedback: (optional) \_\_\_\_\_

**LEVEL ONE – Making Meaning**

Solve visually:

1. Using the two long rectangles below, color in  $\frac{5}{12}$  of the first rectangle and  $\frac{1}{3}$  of the second.

What is the sum of the two? Count the 12ths to find out.



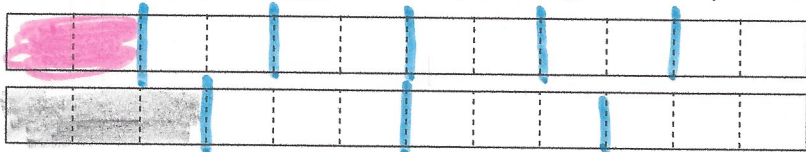
$\frac{9}{12}$

When you count up the 12ths, is there a simpler fraction that represents the same amount? Look at the Fraction Template to figure this out.

Answer:

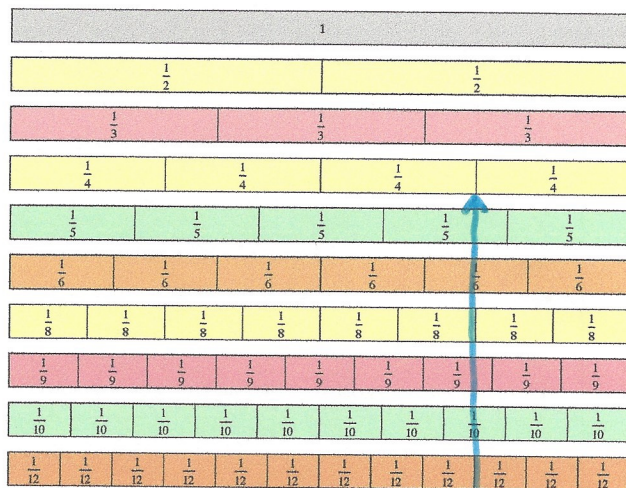
$\frac{3}{4}$

2. Now add  $\frac{1}{6}$  plus  $\frac{1}{4}$ , either by coloring in the strips below, or by imagining them in your head.



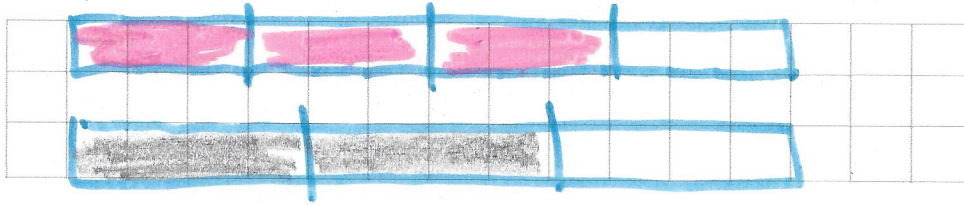
Answer:

$\frac{5}{12}$



**LEVEL TWO**

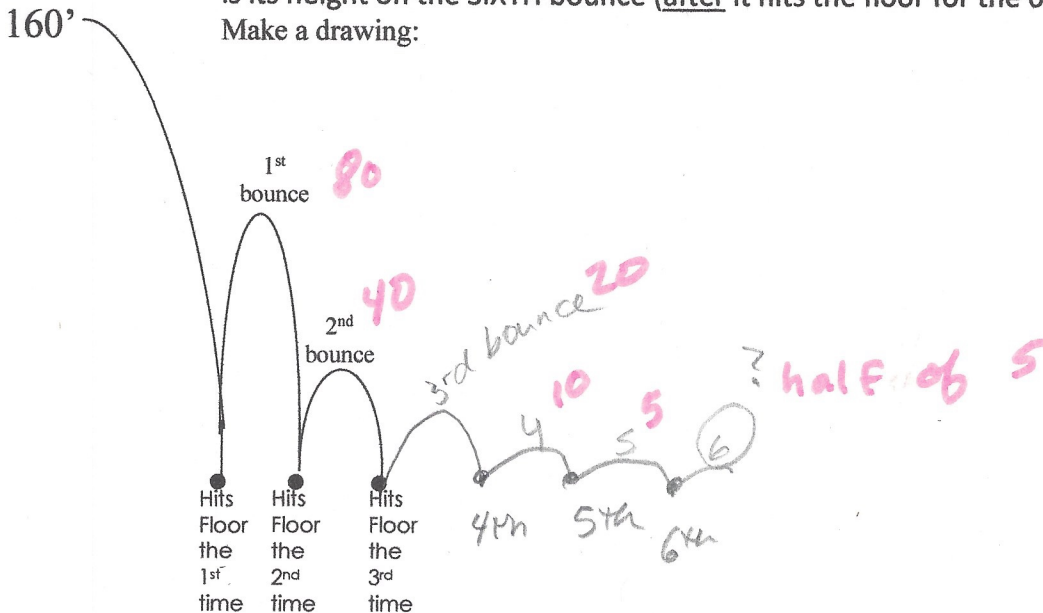
3. Now add  $\frac{3}{4}$  plus  $\frac{2}{3}$ . Draw your own 12-strips in the grid below. What is the sum? (just count up the shaded 12ths)



Answer:

Why is the answer given in 12ths, not 24ths? *The whole bar = 12ths. It is a "12-peak" Toblerone*

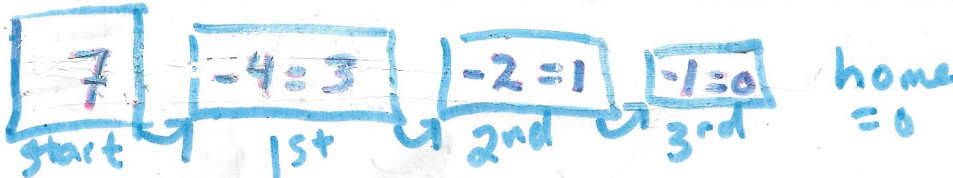
4. A basketball bounces back up ONE HALF of the height from which it is dropped. If it is dropped from 160 feet and keeps bouncing (each time coming back  $\frac{1}{2}$  of the last bounce), what is its height on the SIXTH bounce (after it hits the floor for the 6<sup>th</sup> time)? Make a drawing:



$2\frac{1}{2}$  feet  
or 2'6"

**LEVEL THREE - Challenge** - show your scratch work:

5. Josh, the soccer man, has soccer balls for sale. He travels to the first soccer field and sells half of the soccer balls plus a half of a ball. Then he travels to the next soccer field and sells half of the remaining balls and half of a ball. He travels to a third soccer field and sells half of the remaining soccer balls and a half of a ball. Finally, he returns home with no soccer balls left. Josh accomplishes all of this without cutting any of the balls in half. How many soccer balls did Josh start with? Hint... Start with an ODD number of soccer balls.



Answer:  
7