

RIBBON TASK

OPERATION C

Add and subtract fractions with like denominators using models and symbols

Sample 3

Notice that the student defined the whole as 3 metres, partitioning the entire 3 metre length of ribbon into fifteenths (rather than partitioning each metre into fifths). The student was able to correctly determine that you can make 7 decorations with $\frac{1}{5}$ of a metre left over.

Q: You have 3m of ribbon to make decorations. Each decoration uses $\frac{3}{15}$ of 1m of ribbon.
How many decorations can you make?

$$K=3m$$

$$-1 \text{ decoration} = \frac{3}{15} \text{ or } 1m$$

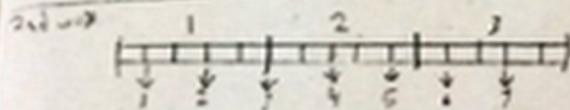
M:

$1m = \frac{15}{15}$ Every meter of ribbon out
 $2m = \frac{30}{15}$ of 6, so 3 meters is a
 $3m = \frac{45}{15}$ total of 15

Decorations:

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.
 $\frac{2}{15}, \frac{4}{15}, \frac{6}{15}, \frac{8}{15}, \frac{10}{15}, \frac{12}{15}, \frac{14}{15}$

Every decoration takes
 $\frac{1}{5}$ of $\frac{3}{15}$ of the ribbon, so in
 the end you can make
 7 ribbons.



You can make a total of 7 ribbons with
 $\frac{1}{5}$ left over.

Extensions:

- If you cut the ribbon in 1m pieces, you could make 6 decorations, because you can't use leftovers.
- Yes, 1 whole could make one decoration.