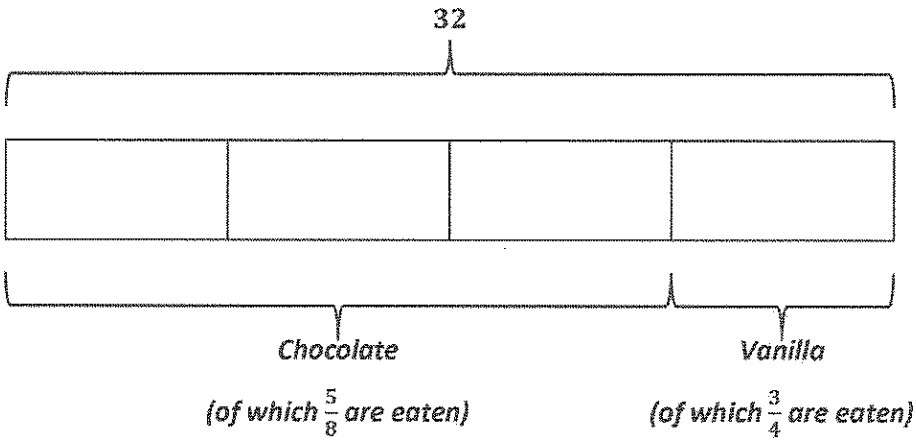
G5-M6-Lesson 27

1. Use the RDW process to solve the word problem below.

   Daquan brought 32 cupcakes to school. Of those cupcakes, $\frac{3}{4}$ were chocolate, and the rest were vanilla. Daquan's classmates ate $\frac{5}{8}$ of the chocolate cupcakes and $\frac{3}{4}$ of the vanilla. How many cupcakes are left?



Of all the cupcakes, 24 are chocolate.

Of all the cupcakes, 8 are vanilla.

Chocolate eaten:

$\frac{3}{4}$ *of* $32 = \frac{3 \times 32}{4} = \frac{96}{4} = 24$

$\frac{5}{8}$ *of* $24 = \frac{5 \times 24}{8} = \frac{120}{8} = 15$

Of the 24 chocolate cupcakes, 15 were eaten.

15 *chocolate cupcakes were eaten.*

Vanilla eaten:

$\frac{1}{4}$ *of* $32 = \frac{1 \times 32}{4} = \frac{32}{4} = 8$

$\frac{3}{4}$ *of* $8 = \frac{3 \times 8}{4} = \frac{24}{4} = 6$

Of the 8 vanilla cupcakes, 6 were eaten.

6 *vanilla cupcakes were eaten.*

Cupcakes left:

$32 - (15 + 6) = 32 - 21 = 11$

11 *cupcakes are left.*

I find the number of leftover cupcakes by subtracting those that were eaten from the 32 original cupcakes.

2. Write and solve a word problem for the expression in the chart below.

Expression	Word Problem	Solution
$5-\left(\frac{5}{12}+\frac{1}{3}\right)$	*During her 5-day work week, Mrs. Gomez spends $\frac{5}{12}$ of one day and $\frac{1}{3}$ of another in meetings. How much of her work week is not spent in meetings?*	$5-\left(\frac{5}{12}+\frac{1}{3}\right)$ $=5-\left(\frac{5}{12}+\frac{4}{12}\right)$ $=5-\frac{9}{12}$ $=4\frac{3}{12}$ $=4\frac{1}{4}$ *$4\frac{1}{4}$ days of Mrs. Gomez' work week was not spent in meetings.*