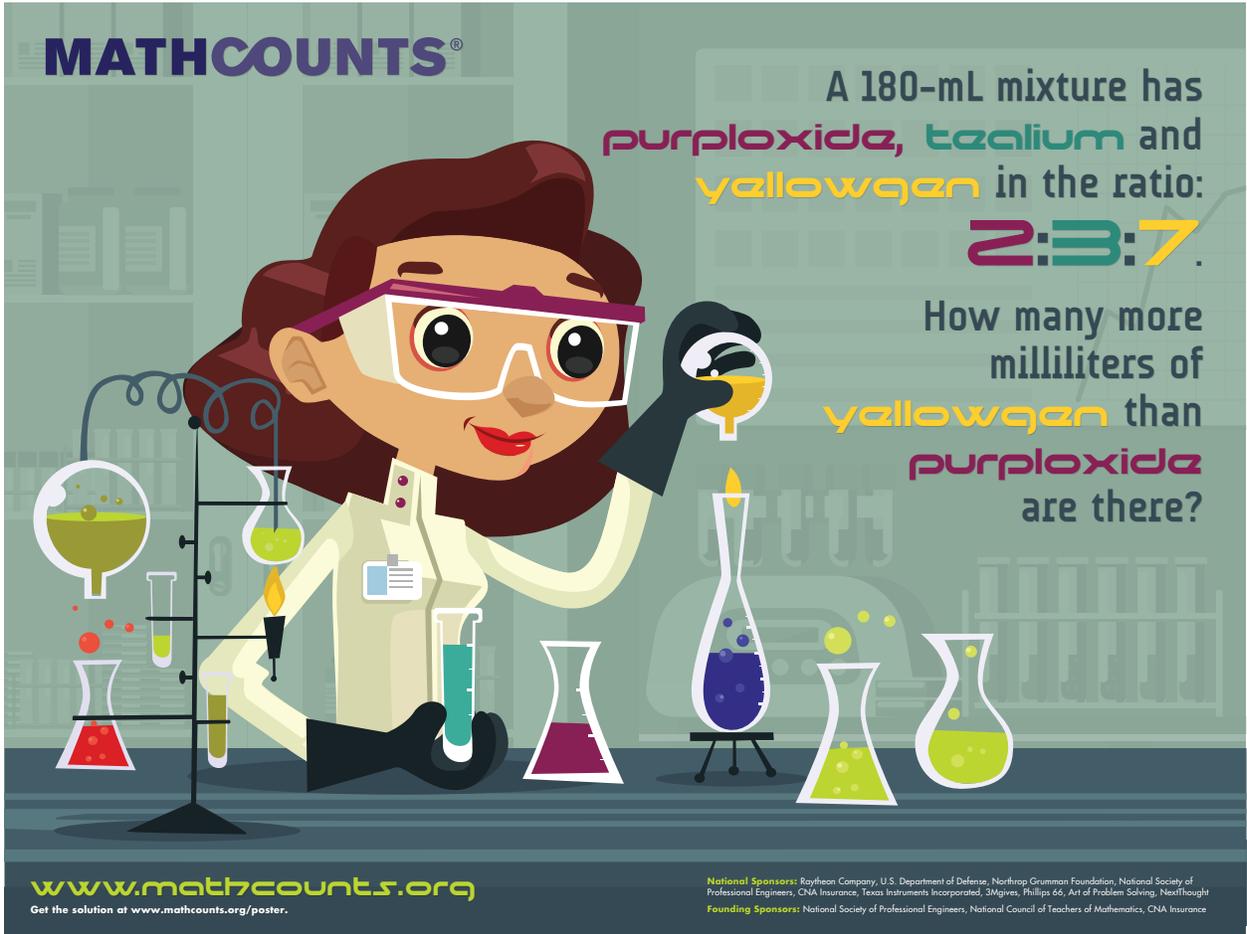


MATHCOUNTS 2018–2019 HB Poster Solution



MATHCOUNTS[®]

A 180-mL mixture has **purploxide**, **tealium** and **yellowgen** in the ratio: **2:3:7**.

How many more milliliters of **yellowgen** than **purploxide** are there?

www.mathcounts.org
Get the solution at www.mathcounts.org/poster.

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Since purploxide, tealium and yellowgen are in the ratio 2:3:7, it follows that

$\frac{2}{12}$ of the 180-mL mixture is purploxide and $\frac{7}{12}$ is yellowgen. The difference is $\frac{7-2}{12} = \frac{5}{12}$ of the mixture, which means there are $180 \times \frac{5}{12} = 15 \times 5 =$

75 more milliliters of yellowgen than purploxide.