1. Draw AND LABEL diagrams to compute the following; do NOT compute a CD numerically - let your diagram do that. Attach a short phrase to the numerator and denominator of the answer to explain how we can see them in the diagram.

\[
\frac{4}{5} - \frac{1}{4} = \frac{11}{20} \text{ shaded pieces kept}
\]

\[
\frac{4}{5} - \frac{1}{4} = \frac{11}{20} \text{ pieces in one whole}
\]

2. Without finding the exact answer, circle the number given in parentheses that is the best approximation for the sum:

\[
\frac{30}{41} + \frac{1}{1000} + \frac{3}{2000} (\frac{3}{8}, \frac{3}{4}) 1, 2
\]

\[
\approx \frac{3}{4} + 0 + 0
\]

3. A class consists of \(\frac{1}{3}\) freshmen, \(\frac{1}{4}\) sophomores, and \(\frac{3}{10}\) juniors. What fraction of the class do these students make up? SHOW CLEAR WORK.

\[
\frac{1}{3} + \frac{1}{4} + \frac{3}{10}
\]

\[
\text{CD} = 600 \approx 120 \text{ or...}
\]

\[
\frac{1}{3} \times \frac{20}{20} = \frac{20}{600}
\]

\[
\frac{1}{4} \times \frac{15}{15} = \frac{15}{600}
\]

\[
\frac{3}{10} \times \frac{6}{6} = \frac{18}{600}
\]

\[
\frac{20}{600} + \frac{15}{600} + \frac{18}{600} \]

\[
= \frac{53}{60}
\]
1. Draw AND LABEL a diagram for computing the product $\frac{5}{4} \times \frac{2}{3}$. Describe how both numerator and denominator of the answer are seen in the diagram.

\[
\begin{array}{c}
\frac{5}{4} \\
\frac{2}{3}
\end{array}
\]

10 pieces double-shaded
12 pieces in one whole

OR

\[
\frac{5}{4}
\]

wholes are dark-outlined

2. Without finding the exact answer, circle the number given in parentheses that is the best approximation for the sum:

\[
\frac{2^{30}}{31} \times \frac{1}{100}
\]

\[
(3, \frac{3}{4}, 0, 2)
\]

\[
\approx 3 \times 0 = 0
\]

3. A class consists of $\frac{2}{5}$ freshmen. If there are 60 students who are NOT freshmen, how many people are in the class? SHOW CLEAR WORK.

Many correct methods.

Here is Singapore:

\[
\begin{array}{ccccc}
20 & 20 & 20 & 20 & 20 \\
\hline
\text{freshmen} & \text{others}
\end{array}
\]

(60 equally shared in 3 sections $\rightarrow 20$ per section)

100 people altogether