

Cancelling

Which of the following computations would you prefer to do?

■ Compute $\frac{113}{3} \times \frac{9}{226}$

Which of the following computations would you prefer to do?

(1) $\frac{113}{33} \times \frac{99}{226} = \frac{11187}{7458}$, oh, and now you get to simplify the fraction $\frac{11187}{7458}$.

What is the chance you would do that without a single error in arithmetic?

Or, would you rather do this

(2) $\frac{\overset{\nearrow 1}{\cancel{113}}}{\underset{\searrow 1}{\cancel{33}}} \times \frac{\overset{\nearrow 3}{\cancel{99}}}{\underset{\searrow 2}{\cancel{226}}} = \frac{3}{2}$, done!

■ Exercise (How many can you do in your head?)

[1] $\frac{25}{9} \times \frac{27}{5} =$

[2] $\frac{35}{7} \times \frac{77}{5} =$

[3] $\frac{52}{3333} \times \frac{33330}{26} =$

[4] $\frac{3}{9} \times \frac{5}{4} =$

[5] $\frac{2}{3} \times \frac{99}{22} =$

[6] $\frac{24}{25} \times \frac{75}{6} =$

[7] $\frac{49}{35} \times \frac{55}{21} =$

[8] $\frac{2}{3} \times \frac{3}{5} \times \frac{5}{7} \times \frac{7}{11} \times \frac{11}{2} =$

[9] $\frac{2}{9} \times \frac{1371}{1372} \times \frac{9}{2} =$

[10] $\frac{25}{16} \times \frac{4}{20} =$

[11] $\frac{21}{15} \times \frac{7}{5} =$