

Warm Up Grade 8

Jan. 19, 2017

- 1) One-third of the grade 8 students tried out for a talent show. One-quarter of these students were successful. What fraction of the grade 8 students are performing at the show?

$\frac{1}{4}$ of $\frac{1}{3}$ grade 8 students

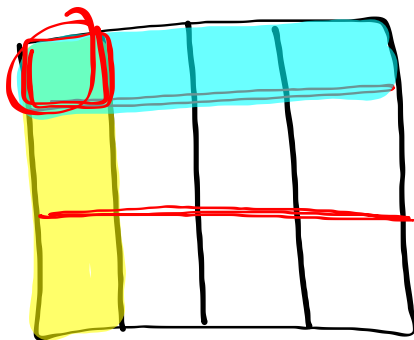
Shade \rightarrow

cut
int \rightarrow

$$\frac{1}{4} \times \frac{1}{3}$$

\leftarrow Shade whole row

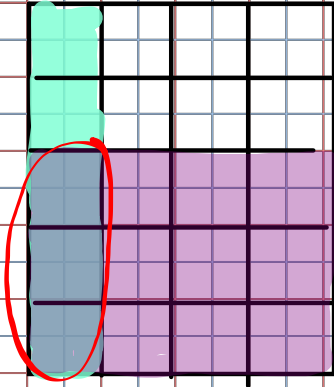
\leftarrow cut vertical into 3^{nds}



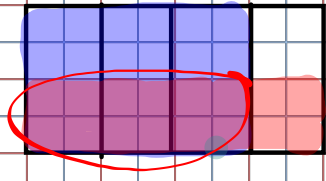
$$= \frac{1}{12}$$

Homework Solutions

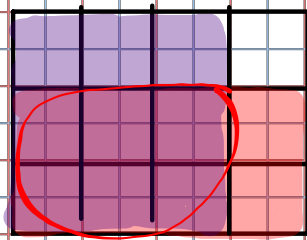
★ 5. pg 113
 $\frac{3}{5} \times \frac{1}{4}$
 $= \frac{3}{20}$



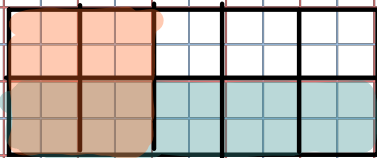
★ 6 a)
 $\frac{1}{2} \times \frac{3}{4}$
 $= \frac{3}{8}$



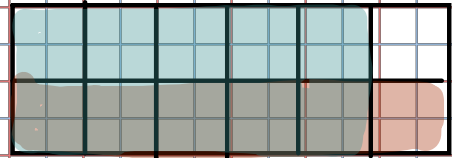
★ 6 b)
 $\frac{3}{4} \times \frac{2}{3}$
 $= \frac{6}{12}$
 Reduce $\frac{1}{2}$



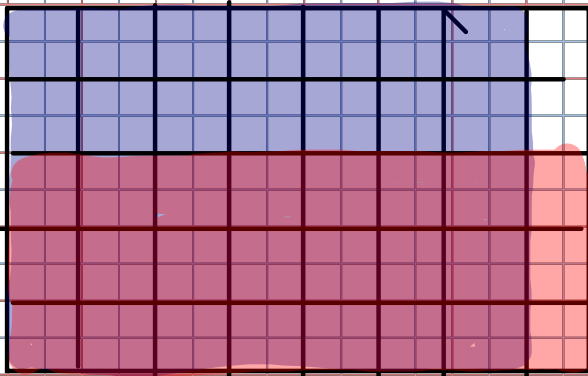
★ 7 c)
 $\frac{1}{2} \times \frac{1}{5}$
 $= \frac{1}{10}$
 $= \frac{1}{5}$



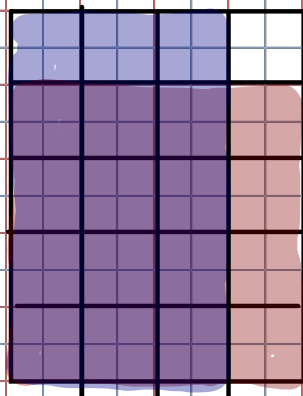
★ 7 d)
 $\frac{5}{6} \times \frac{1}{2}$
 $= \frac{5}{12}$



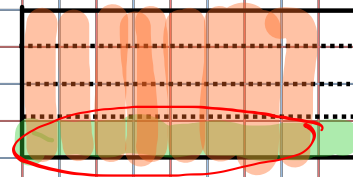
★ 8)
 $\frac{3}{5} \times \frac{7}{8}$
 $= \frac{21}{40}$



★ 9)
 $\frac{4}{5} \times \frac{3}{4}$
 $= \frac{12}{20}$
 $= \frac{3}{5}$

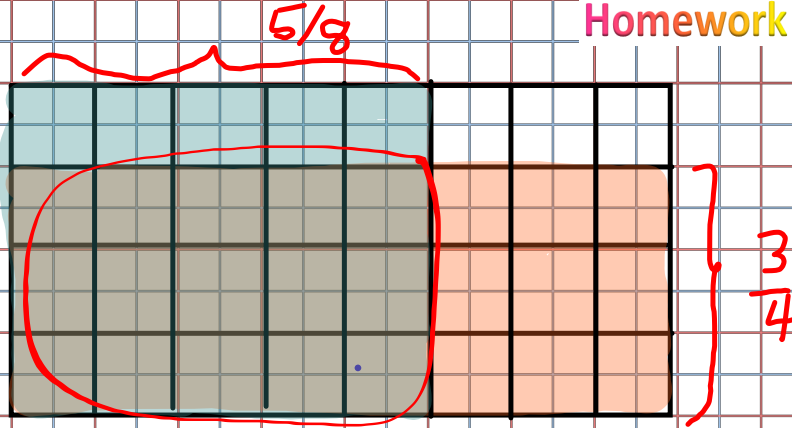


10) $\frac{1}{4} \times \frac{8}{9} = \frac{8}{36} = \frac{2}{9}$ Reduce

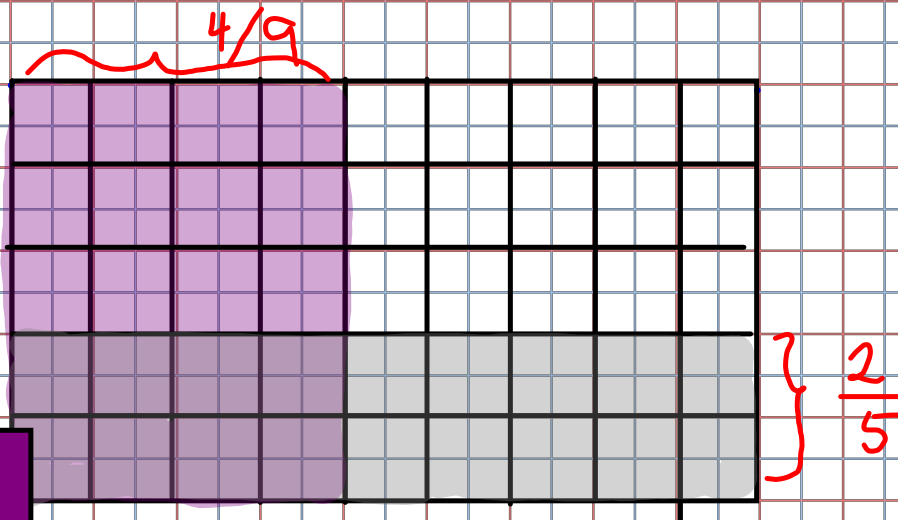


Homework Solutions

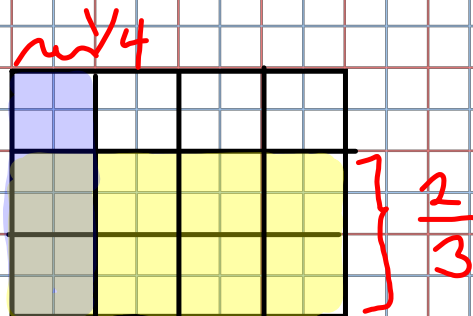
★ a) $\frac{3}{4} \times \frac{5}{8}$
 $= \frac{15}{32}$



b) $\frac{4}{9} \times \frac{2}{5}$
 $= \frac{8}{45}$

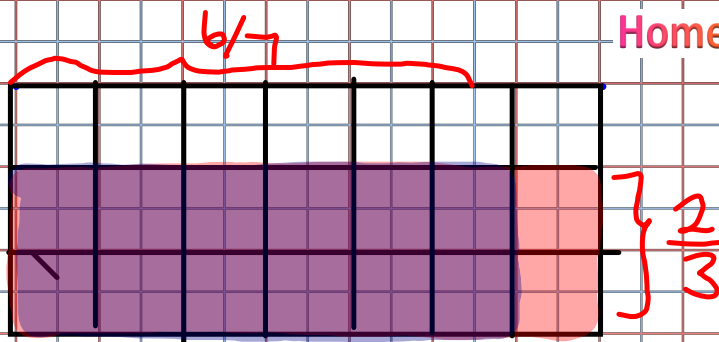


★ c) $\frac{1}{4} \times \frac{2}{3}$
 $= \frac{2}{12}$
 $= \frac{1}{6}$

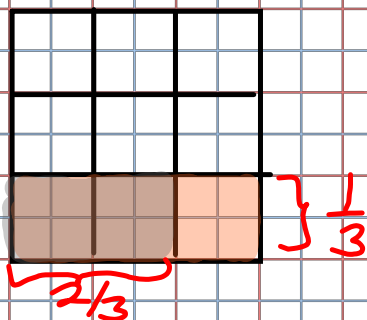


Homework Solutions

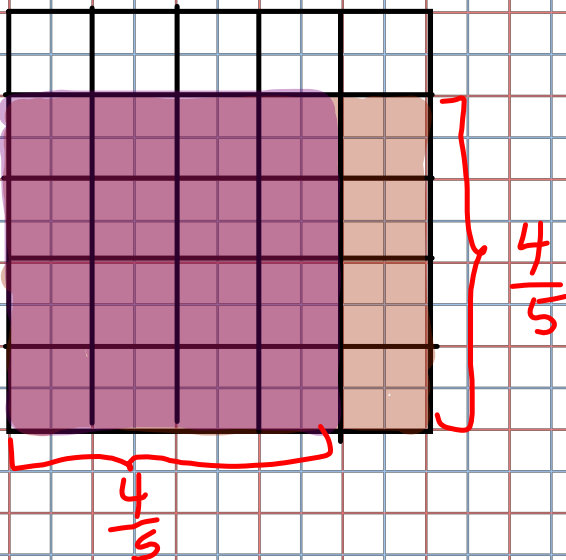
d) $\frac{6}{7} \times \frac{2}{3}$
 $= \frac{12}{21}$
 $= \frac{4}{7}$



★ e) $\frac{2}{3} \times \frac{1}{3}$
 $= \frac{2}{9}$



f) $\frac{4}{5} \times \frac{4}{5}$
 $= \frac{16}{25}$



Multiplying Fractions

When you are multiplying fractions, you simply multiply the numerators and multiply the denominators. (**Always Reduce**)
Either before or after

Ex. $\frac{2}{9} \times \frac{7}{11} = \frac{2 \times 7}{9 \times 11} = \frac{14}{99}$

b) reduce as you go or at end
 $\frac{8}{15} \times \frac{3}{4} = \frac{24}{60} \stackrel{\div 2}{=} \frac{12}{30} \stackrel{\div 2}{=} \frac{6}{15} \stackrel{\div 3}{=} \frac{2}{5}$
 $\frac{24}{60} \stackrel{\div 12}{=} \frac{2}{5}$

c) $\frac{5}{12} \times \frac{6}{7} = \frac{5 \times 1}{2 \times 7} = \frac{5}{14}$

d) $\frac{2}{3} \times \frac{15}{21} = \frac{30}{63} \stackrel{\div 3}{=} \frac{10}{21}$

$\frac{2}{3} \times \frac{15}{21} = \frac{10}{21}$

Reduce at end method

$\frac{5}{12} \times \frac{6}{7} = \frac{30}{84} \stackrel{\div 2}{=} \frac{15}{42} \stackrel{\div 3}{=} \frac{5}{14}$

$$\frac{\cancel{8}^2}{\cancel{15}_5} \times \frac{\cancel{3}^1}{\cancel{4}_1} = \frac{2 \times 1}{5 \times 1} = \frac{2}{5}$$

Multiplying Mixed Fractions

-ALWAYS Change to IMPROPER first

When you multiply mixed numbers, change them to improper fractions first, then multiply the numerators and multiply the denominators.

$$a) 1 \frac{4}{7} \times 2 \frac{1}{6}$$

$$= \frac{11}{7} \times \frac{13}{6}$$

$$= \frac{143}{42}$$

$$b) 3 \frac{3}{5} \times 4 \frac{5}{8}$$

$$= \frac{18}{5} \times \frac{37}{8}$$

$$= \frac{9 \times 37}{5 \times 4}$$

$$= \frac{333}{20}$$

$$= \frac{18}{5} \times \frac{37}{8}$$

$$= \frac{18 \times 37}{5 \times 8}$$

$$= \frac{666}{40} \div 2$$

$$= \frac{333}{20}$$

or

Class/Homework

Page 114 # 13 (Model and answer)

Page 118 #6, #7, #8, #9, #11, #12a

(Don't estimate or model just multiply and reduce)