

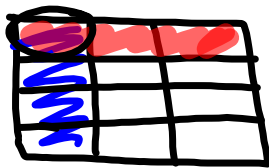


Warm Up Grade 8

Nov. 29, 2022

Use grid paper and model

- 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?



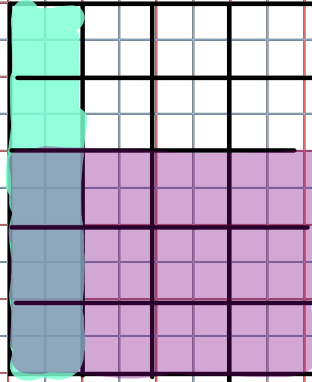
$$\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$$

↑
cut
vertical
3 pieces
1 shade

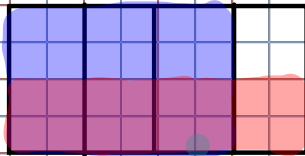
↑
cut
horizontal
into 4 pieces
Shade 1
row ↔

Homework Solutions

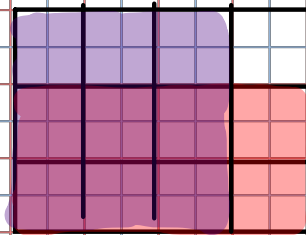
★ pg 113
 $5\frac{2}{3} \times \frac{1}{4}$
 $= \frac{23}{20}$



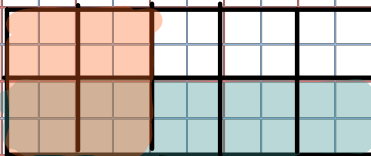
★ 6
 $2\frac{1}{3} \times \frac{3}{4}$
 $= \frac{13}{8}$



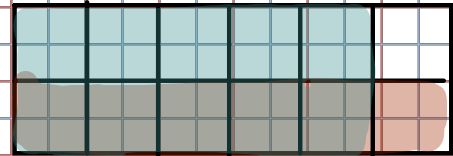
★ 5)
 $\frac{3}{4} \times \frac{2}{3}$
 $= \frac{6}{12}$



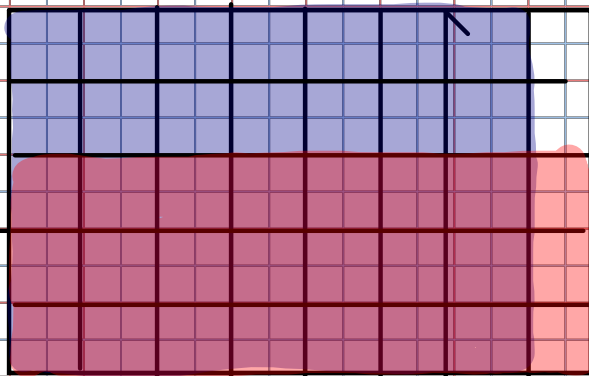
★ 3)
 $1\frac{1}{2} \times \frac{1}{2}$
 $= \frac{5}{4}$



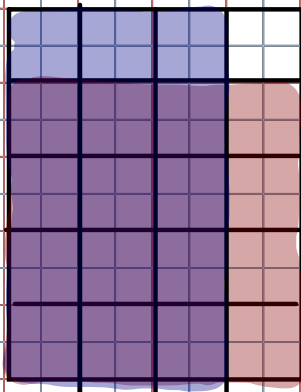
★ 1)
 $\frac{5}{6} \times \frac{1}{2}$
 $= \frac{5}{12}$



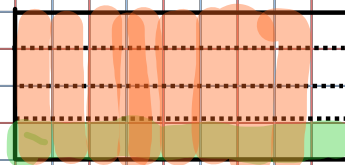
★ 2)
 $5\frac{1}{3} \times \frac{1}{8}$
 $= \frac{17}{24}$



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

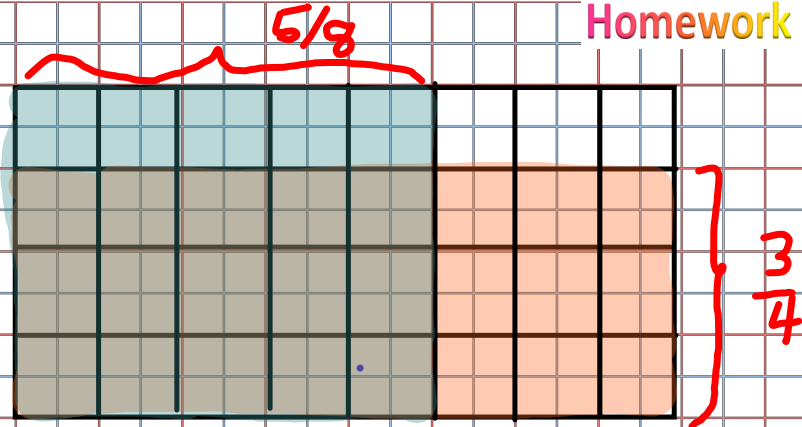


★ 2)
 $\frac{1}{4} \times \frac{9}{6} = \frac{9}{24} = \frac{3}{8}$

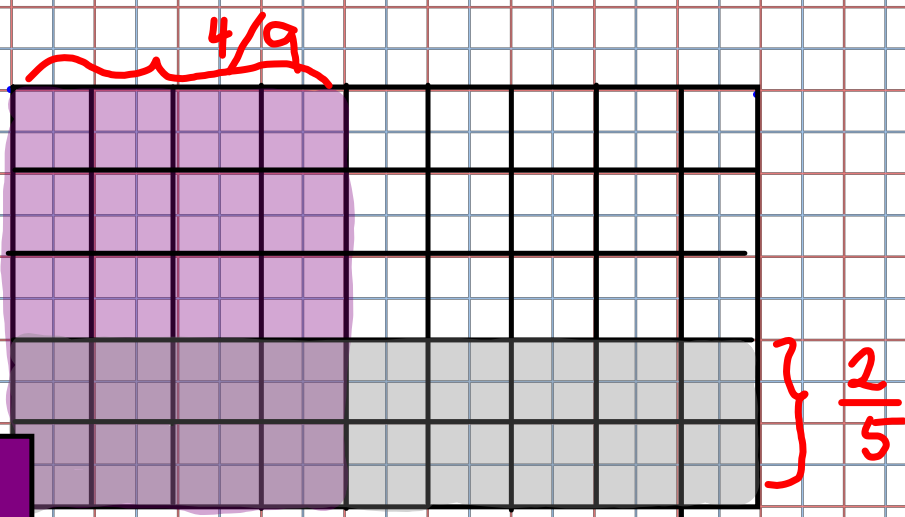


Homework Solutions

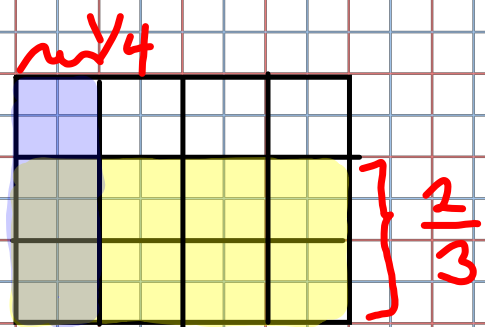
★ 8a) $\frac{3}{4} \times \frac{5}{8}$
 $= \frac{15}{32}$



b) $\frac{4}{9} \times \frac{2}{3}$
 $= \frac{8}{45}$

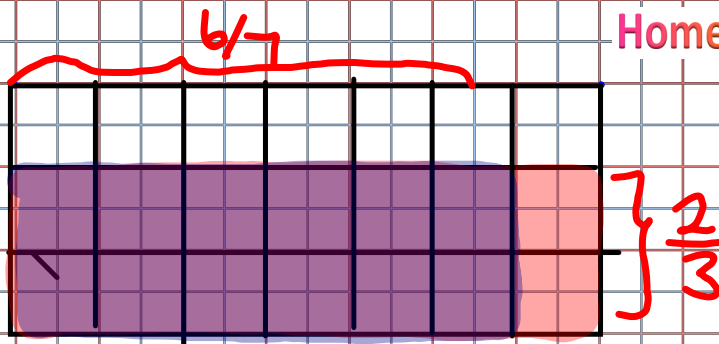


★ c) $\frac{1}{4} \times \frac{2}{3}$
 $= \frac{2}{12}$
 $= \frac{1}{6}$

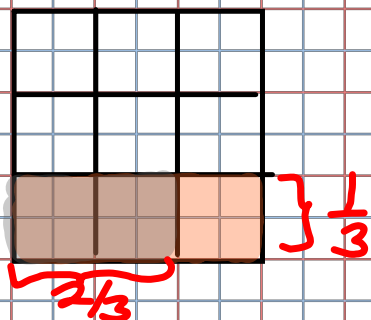


Homework Solutions

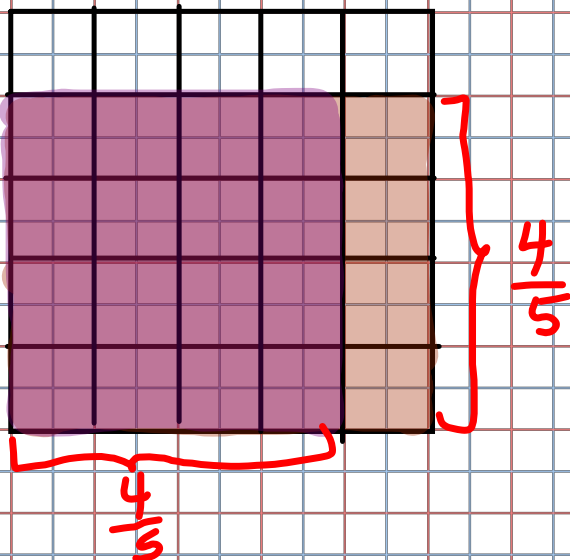
d) $\frac{6}{7} \times \frac{2}{3}$
 $= \frac{12}{21}$
 $= \frac{4}{7}$



★ 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) $\frac{8}{15} \times \frac{3}{4} =$ reduce as you go or at end

$$\frac{2}{5} \times \frac{1}{1} = \frac{2}{5}$$

OR

$$\frac{8}{15} \times \frac{3}{4} = \frac{24}{60} \xrightarrow{\div 2} \frac{12}{30} \xrightarrow{\div 3} \frac{4}{10} \xrightarrow{\div 2} \frac{2}{5}$$

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

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

OR

$$= \frac{5}{12 \div 6} \times \frac{6 \div 6}{7}$$

$$= \frac{5}{2} \times \frac{1}{7}$$

$$= \frac{5}{14}$$

OR

$$\frac{2}{3 \div 3} \times \frac{15 \div 3}{21}$$

$$\frac{2}{1} \times \frac{5}{21} = \frac{10}{21}$$

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

change to improper

$$\frac{11}{7} \times \frac{13}{6} = \frac{143}{42}$$

$$= 3\frac{17}{42}$$

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

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

or

$$\frac{18 \div 2}{5} \times \frac{37}{8 \div 2}$$

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

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

$$16\frac{13}{20}$$

Class/Homework

Page 113 # 13 (Model and answer)

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

*multiply
and
reduce*

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