Name: .... Class: ....
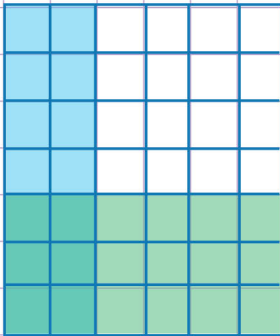
Multiply two fractions using models: fill in the missing factor

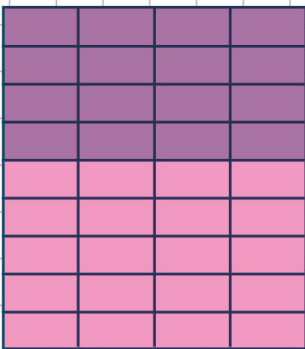**Use the models below to find the missing factors.**

a. $\dfrac{2}{6} \times \dfrac{\square}{\square} = \dfrac{6}{42}$

b. $\dfrac{\square}{\square} \times \dfrac{4}{9} = \dfrac{16}{36}$

c. $\dfrac{6}{\square} \times \dfrac{\square}{\square} = \dfrac{18}{99}$

mathskills4kids

Name: ....   Class: ....

Multiply two fractions using models: fill in the missing factor
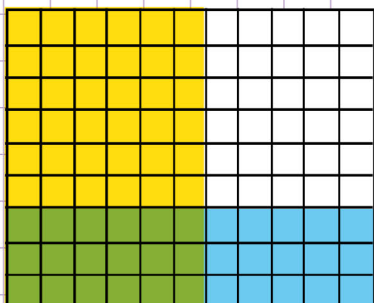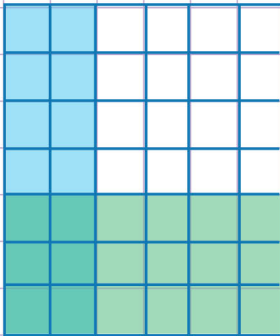
Use the models below to find the missing factors.

a.

$$\frac{2}{6} \times \frac{\square}{\square} = \frac{6}{42}$$

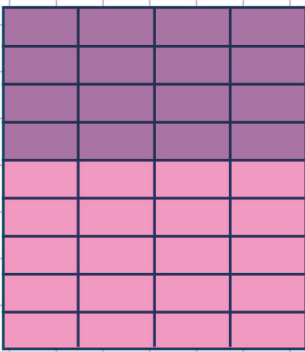The model has 6 columns. 2 out of these 6 columns are shaded in blue.
These blue columns represents the given fraction $\frac{2}{6}$
Also, the model has 7 rows. 3 out of these 7 rows are shaded in green.
These green rows represents the missing fraction $\frac{3}{7}$

Therefore, the complete expression is $\frac{2}{6} \times \frac{3}{7} = \frac{6}{42}$

b.

$$\frac{\square}{\square} \times \frac{4}{9} = \frac{16}{36}$$

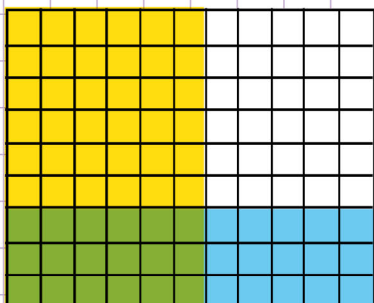The model has 4 columns. 4 out of these 4 columns are shaded in grey.
These grey columns represents the missing fraction $\frac{4}{4}$
Also, the model has 9 rows. 4 out of these 9 rows are shaded in orange.
These orange rows represents the missing given fraction $\frac{4}{9}$

Therefore, the complete expression is $\frac{4}{4} \times \frac{4}{9} = \frac{16}{36}$

c.

$$\frac{6}{\square} \times \frac{\square}{\square} = \frac{18}{99}$$

The model has 11 columns. 6 out of these 11 columns are shaded in yellow
These yellow columns represents the fraction $\frac{6}{11}$ (11 is the missing number)
Also, the model has 9 rows. 3 out of these 9 rows are shaded in purple
These purple rows represents the missing fraction $\frac{3}{9}$

Therefore, the complete expression is $\frac{6}{11} \times \frac{3}{9} = \frac{18}{99}$