

# BROWNIES: MULTIPLYING FRACTIONS

1. With multi-link cubes...

a) Show  $\frac{1}{2}$

b) Show  $\frac{1}{2}$  of  $\frac{1}{2}$

c) Show  $\frac{3}{4}$

d) Show  $\frac{1}{2}$  of  $\frac{3}{4}$

2. Is there an easier way to represent this, without drawing the diagrams? Show this symbolic method.

a)  $\frac{1}{2} \cdot \frac{1}{2}$

b)  $\frac{1}{2} \cdot \frac{3}{4}$

3. Show how both methods above can be used to solve the following problem:

a) Show  $\frac{5}{6}$

b) Show  $\frac{2}{3}$  times  $\frac{5}{6}$

4. What is the outcome of  $\frac{a}{b} \cdot \frac{c}{d}$ ?



5. Your friend shares a brownie equally with you. You share your portion of the brownie among you and two friends (three portions). One of the friends says "No thank you," so you keep his portion.

a) Show, horizontally, the first portion that you receive.

b) Show, vertically, the portion of it that you keep.

c) What operation with fractions does this represent.



6. Represent the solution to the following problems both geometrically and symbolically.

a)  $\frac{1}{3} \cdot \frac{1}{5}$

b)  $\frac{1}{3} \cdot \frac{3}{5}$

c)  $\frac{1}{4} \cdot \frac{4}{5}$

d)  $\frac{2}{3} \cdot \frac{3}{4}$

