6.) Compute:

a. $(0.3)^3$ $.3 \cdot .3 \cdot .3 =$ 0.027

b. $(4.5)^2$ $4.5(4.5) =$ 20.25

c. $(0.02)^3$ $0.02 \cdot 0.02 \cdot 0.02 =$ 0.0000008

d. $(1.0)^4$ $1 \cdot 1 \cdot 1 \cdot 1 = 1$

7.) Compute:

a. $\left(\frac{6}{3}\right)^2$ $\frac{2\cancel{6}}{\cancel{3}_1} \cdot \frac{2\cancel{6}}{\cancel{3}_1} = 4$

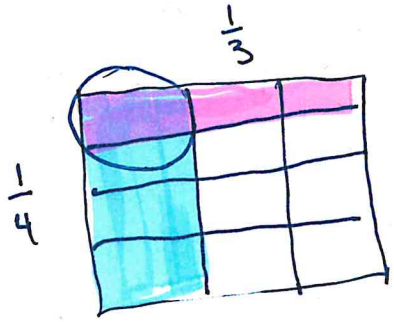
b. $\left(\frac{2}{3}\right)^4$ $\frac{2}{3} \cdot \frac{2}{3} = \frac{4}{9} \cdot \frac{2}{3} = \frac{8}{27} \cdot \frac{2}{3} = \frac{16}{81}$

8.) Fill in the multiplication table. Simplify where possible.

Multiply:	3	$\frac{3}{4}$	$2\frac{1}{2}$
12	36	$\frac{\cancel{12}^3}{1} \cdot \frac{3}{\cancel{4}_1} = 9$	$\frac{\cancel{12}^6}{1} \cdot \frac{5}{\cancel{2}_1} = 30$
$\frac{1}{9}$	$\frac{1}{\cancel{9}_3} \cdot \frac{\cancel{3}^1}{1} = \frac{1}{3}$	$\frac{1}{\cancel{9}^3} \cdot \frac{\cancel{3}^1}{4} = \frac{1}{12}$	$\frac{1}{9} \cdot \frac{5}{2} = \frac{5}{18}$
$\frac{2}{5}$	$\frac{2}{5} \cdot \frac{3}{1} = \frac{6}{5} = 1\frac{1}{5}$	$\frac{2}{5} \cdot \frac{3}{\cancel{4}_2} = \frac{3}{10}$	$\frac{2}{5} \cdot \frac{5}{2} = 1$

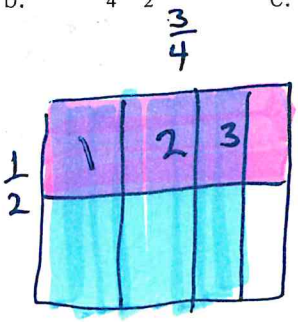
9.) Draw a model for each of the following multiplication problems and compute the answer.

a. $\frac{1}{4} \cdot \frac{1}{3}$



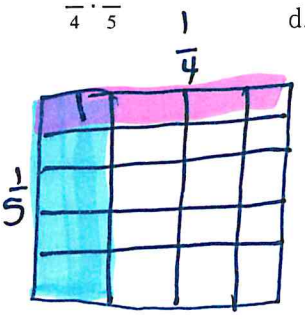
$\frac{1}{12}$

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



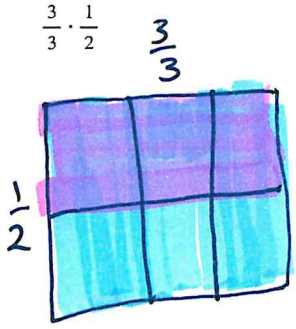
$\frac{3}{8}$

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



$\frac{1}{20}$

d. $\frac{3}{3} \cdot \frac{1}{2}$



$\frac{1}{2}$

10.) Multiply: $\left(5\frac{1}{2}\right) \cdot \left(2\frac{1}{6}\right) =$

$\frac{11}{2} \cdot \frac{13}{6} = \frac{143}{12} = 11\frac{11}{12}$