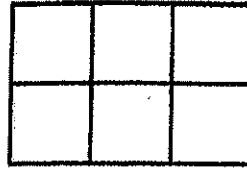


a. A small square is a square unit. What is the area of this rectangle? Explain.

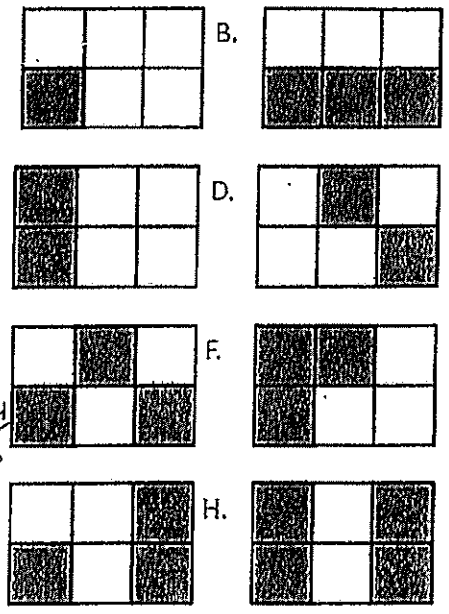
To get the area you multiply length \times width.
 $(2) \times (3)$
 I got 6^2 units



2^2 units \times 3^2 units = 6 sq. units

b. What fraction of the area of each rectangle is shaded blue? Name the fraction in as many ways as you can. Explain your answers.

$A = \frac{1}{6} = \frac{2}{12} = \frac{4}{24} = \frac{8}{48} = \frac{16}{96} = \frac{32}{192}$
 $B = \frac{1}{2}$ same as E, F, G
 $C = \frac{1}{3} = \frac{2}{6} = \frac{4}{12} = \frac{8}{24} = \frac{16}{48} = \frac{32}{96}$
 $D = \frac{1}{3}$ same as C
 $E = \frac{1}{2}$ same as F and G
 $F = \frac{1}{2} = \frac{3}{6} = \frac{4}{8} = \frac{6}{12} = \frac{8}{16} = \frac{10}{20}$
 $G = \frac{1}{2} = \frac{3}{6} = \frac{4}{8} = \frac{6}{12} = \frac{8}{16} = \frac{10}{20}$
 $H = \frac{2}{3} = \frac{4}{6} = \frac{8}{12} = \frac{16}{24} = \frac{32}{48} = \frac{64}{96}$

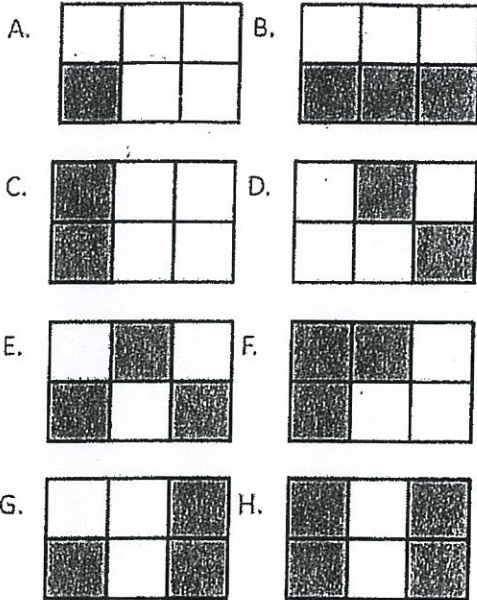


I got all the equivalent fractions because I multiplied all the fractions by $\frac{2}{2}$. To get my first solution by taking the one unit which was 6 boxes and counted all the colored boxes to get $\frac{1}{6}$ which means 1 out of 6 pieces. Then I multiplied that by $\frac{2}{2}$.



6 square units
 $2^2 \text{ units} \times 3^2 \text{ units} = 6^2 \text{ uni}$
 sq

b. What fraction of the area of each rectangle is shaded ~~blue~~ gray? Name the fraction in as many ways as you can. Explain your answers.



$A = \frac{1}{6} = \frac{2}{12} = \frac{4}{24} = \frac{5}{30} = \frac{3}{18} = \frac{6}{36}$
 $B = \frac{3}{6} = \frac{1}{2}$
 $C = \frac{2}{6} = \frac{1}{3}$
 $D = \frac{2}{6} = \frac{1}{3} = \text{same as } C$
 $E = \frac{3}{6} = \frac{1}{2} = \text{same as } B$
 $F = \frac{3}{6} = \frac{1}{2} = \text{same as } B$
 $G = \frac{3}{6} = \frac{1}{2} = \text{same as } B$
 $H = \frac{4}{6} = \frac{2}{3} = \frac{8}{12} = \frac{12}{18} = \frac{16}{24} =$

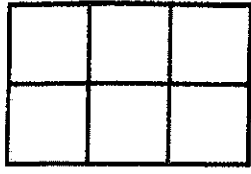
J

I multiplied by a form of one to get each fraction. I started by multiplying by $\frac{2}{2}$ then $\frac{3}{3}$ then $\frac{4}{4}$ then $\frac{5}{5}$ and finally $\frac{6}{6}$. For the first box, I counted the amount of squares in the rectangle, then I counted the shaded boxes. I got $\frac{1}{6}$ for the first example.

~~I did a sequence of multiplying fractions.~~

a. A small square is a square unit. What is the area of this rectangle? Explain.

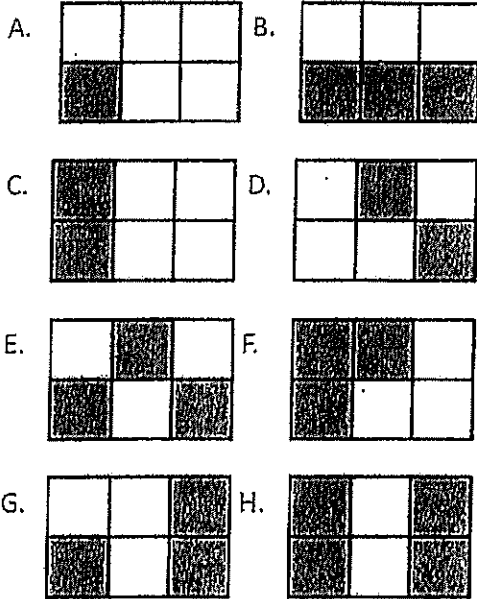
I think area of the rectangle is 6 square units. I know this because the rectangle



is split up into 6 small squares and it said that a small square is a square unit.

b. What fraction of the area of each rectangle is shaded blue? Name the fraction in as many ways as you can. Explain your answers.

- A. $\frac{1}{6}, \frac{2}{12}, \frac{4}{24}, \frac{3}{18}$
- B. $\frac{1}{2}, \frac{3}{6}, \frac{9}{18}, \frac{6}{12}$
- C. $\frac{1}{3}, \frac{2}{6}, \frac{4}{12}, \frac{6}{18}$
- D. $\frac{2}{6}, \frac{1}{3}, \frac{6}{18}, \frac{4}{12}$
- E. $\frac{1}{2}, \frac{3}{6}, \frac{50}{100}, \frac{9}{18}$
- F. $\frac{3}{6}, \frac{1}{2}, \frac{50}{100}, \frac{4}{8}$
- G. $\frac{1}{2}, \frac{3}{6}, \frac{500}{1000}, \frac{6}{12}$
- H. $\frac{4}{6}, \frac{8}{12}, \frac{12}{18}, \frac{16}{24}$



I think

To find the fraction of the shape, I looked at how many parts the rectangle was split into. That would be the denominator ($\frac{1}{6}$). Then I looked at how many parts was shaded, and that would be the numerator ($\frac{1}{6}$). To find the equivalent fraction I would double the numerator and denominator.

One way is to multiply by a form of one. ~~Ex: $\frac{3}{6} \cdot \frac{3}{3} = \frac{9}{18}$~~ Ex: $\frac{3}{6} \cdot \frac{3}{3} = \frac{9}{18}$

$\frac{3}{3}$ is a form of one. When you multiply by 1, the value stays the same.