Multiply Fractions

1. Simplify these rational expressions. Simplify *before* any multiplications.

a. $\dfrac{5 \times 6}{6 \times 7}$

b. $\dfrac{10 \times 5}{90}$

c. $\dfrac{4 \times 15}{5 \times 8}$

d. $\dfrac{18 \times 30}{25 \times 14}$

e. $\dfrac{5^2}{40}$

f. $\dfrac{10 \times 5 \times 3}{20 \times 18}$

g. $\dfrac{56 \times 6}{7 \times 21}$

h. $\dfrac{2 \times 30 \times 4}{16 \times 5}$

i. $\dfrac{24}{8 \times 3}$

j. $\dfrac{24}{8 - 3}$

k. $\dfrac{24}{8 + 3}$

l. $\dfrac{4 \times 12}{8} + \dfrac{5 \times 21}{7}$

2. Multiply the fractions. Simplify, if you can, before you multiply.

a. $\dfrac{5}{6} \times \dfrac{18}{20}$

b. $\dfrac{3}{4} \times \dfrac{7}{5}$

c. $\dfrac{2}{3} \times 6$

d. $\left(\dfrac{2}{7}\right)^2$

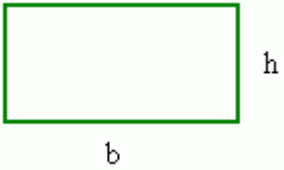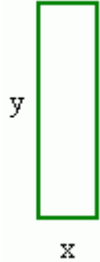e. $\left(\dfrac{1}{2}\right)^5$

f. $\left(\dfrac{7}{10}\right)^2$

g. $7 \times 1\dfrac{1}{7}$

h. $9 \times \dfrac{4}{15}$

i. $2\dfrac{1}{3} \times 5\dfrac{5}{11}$

3. Find the area and perimeter of the rectangles, if...

a. ... h = 3/4" and b = 1 3/16".

b. ... x = $\dfrac{1}{2}$ ft and

   y = $2\dfrac{3}{4}$ ft.

4. Solve.

a. $\dfrac{4}{5} \times \dfrac{3}{8} + \dfrac{1}{2}$

b. $2\dfrac{4}{7} \times 1\dfrac{2}{5} - 1\dfrac{1}{2}$

c. $\dfrac{17}{20} - \dfrac{1}{2} \times \dfrac{5}{6}$

5. Simplify.

a. $\dfrac{12 \times 10}{35 \times 20} \times \dfrac{5}{8}$

b. $\dfrac{12 + 10}{35 + 20} \times \dfrac{5}{8}$

c. $\dfrac{12 \times 10}{35 - 20} \times \dfrac{5}{8}$