Copy and multiply.

1. (a) $\frac{6}{10} \times \frac{5}{12}$
(b) $\frac{2}{3} \times \frac{18}{20}$
(c) $\frac{3}{8} \times \frac{12}{27}$
(d) $\frac{5}{18} \times \frac{54}{45}$

Solution 1:-

$$
\begin{aligned}
\text { (a) } \begin{aligned}
\frac{6}{10} \times \frac{5}{12} & \text { (b) } \frac{2}{3} \times \frac{18}{20} \\
=\frac{6}{10} \times \frac{5}{12} & =\frac{2}{3} \times \frac{18}{2070} \\
= & \frac{1 \times 1}{2 \times 2} \\
& =\frac{1 \times 3}{1 \times 5} \\
= & =\frac{1}{4}
\end{aligned}
\end{aligned}
$$

(d)

$$
\begin{aligned}
& \frac{5}{18} \times \frac{54}{45} \\
= & \frac{5}{18} \times \frac{54}{45} / /_{3} \\
= & \frac{1 \times 1}{1 \times 3}=\frac{1}{3}
\end{aligned}
$$

In Q1. (c) is homework
2. (a) $\frac{4}{10} \times \frac{2}{6} \times \frac{25}{16}$
(b) $\frac{7}{11} \times \frac{33}{49} \times \frac{14}{44}$
(c) $\frac{42}{15} \times \frac{3}{7} \times \frac{5}{36}$

Solution 2:-

$$
\begin{aligned}
& \text { (a) } \frac{4}{10} \times \frac{2}{6} \times \frac{25}{16} \\
&= \frac{4}{10} \times \frac{2}{6} \times \frac{25}{1682} \\
&= \frac{1 \times 1 \times 5}{2 \times 6 \times 2} \\
&= 5 \\
& 24
\end{aligned}
$$

(b)

$$
\text { b) } \begin{aligned}
& \frac{7}{11} \times \frac{33}{49} \times \frac{14}{44} \\
= & \frac{1}{11} \times \frac{33}{49} \times \frac{14}{44} \\
= & \frac{1 \times 3 \times 1}{1 \times 1 \times 22} \\
= & \frac{3}{22}
\end{aligned}
$$

In Q2. (c) is homework
3. (a) $1 \frac{7}{8} \times 3 \frac{1}{5}$
(b) $9 \frac{1}{11} \times 10 \frac{1}{12}$
(c) $2 \frac{3}{5} \times 1 \frac{1}{4}$
(d) $2 \frac{1}{7} \times 3 \frac{1}{2}$
(e) $3 \frac{11}{15} \times 1 \frac{42}{63}$
(f) $1 \frac{2}{7} \times 5 \frac{5}{6}$
(g) $4 \frac{3}{4} \times 1 \frac{7}{57}$
(h) $12 \frac{1}{2} \times 3 \frac{1}{5}$

Solution 3:-
(a) $1 \frac{7}{8} \times 3 \frac{1}{5}$
(b) $9 \frac{1}{11} \times 10 \frac{1}{12}$

3
$\frac{15}{81} \times \frac{2}{2}$
$\frac{16}{51}$


$$
\begin{array}{ll}
=\frac{3 \times 2}{1 \times 1} & =\frac{25 \times 11}{1 \times 3} \\
=\frac{6}{1}=6 & =\frac{275}{3}=91 \frac{2}{3}
\end{array}
$$

(e) $3 \frac{11}{15} \times 1 \frac{42}{63}$
(h) $12 \frac{1}{2} \times 3 \frac{1}{5}$

$$
\begin{aligned}
& =\frac{56}{151} \times \frac{105}{-639} \\
& =\frac{56 \times 1}{1 \times 9}
\end{aligned}
$$

$$
\begin{array}{r}
5 \\
=\frac{25}{-21} \times \frac{8}{-51}
\end{array}
$$

$$
=\frac{5 \times 8}{\mid \times 1}
$$

$$
=\frac{56}{9}
$$

$$
=\frac{40}{1}
$$

$$
=6 \frac{2}{9}
$$

$$
=40
$$

In Q3. (c), (d), (f) and (g) are homework

Find the product and write in the simplest form.

1. $18 \times \frac{5}{6}$
2. $3 \times \frac{1}{3}$
3. $3 \times \frac{2}{5}$
4. $10 \times 1 \frac{5}{8}$
5. $10 \times 1 \frac{2}{15}$
6. $34 \times \frac{10}{68}$
7. $44 \times \frac{13}{220}$
8. $75 \times \frac{19}{100}$
9. $12 \times \frac{7}{20}$
10. $18 \times \frac{4}{33}$
11. $60 \times \frac{11}{105}$
12. $220 \times \frac{15}{66}$

Solutions:-

$$
\begin{aligned}
& \text { 1.) } 18 \times \frac{5}{6} \\
& \text { 4.) } 10 \times 1 \frac{5}{8} \\
& =\frac{3}{18} \times \frac{5}{1} \\
& =\frac{5}{10} \times \frac{13}{84} \\
& =\frac{3 \times 5}{1 \times 1} \\
& =\frac{5 \times 13}{1 \times 4} \\
& =\frac{15}{1}=15 \\
& =\frac{65}{4}=16 \frac{1}{4}
\end{aligned}
$$

5.) $10 \times 1 \frac{2}{15}$
7.) $44 \times \frac{13}{220}$

$$
\begin{array}{ll}
=\frac{10}{1} \times \frac{17}{15} & =\frac{\frac{22}{22}}{1} \times \frac{\frac{13}{\frac{220}{110}}}{100} \\
=\frac{2 \times 17}{1 \times 3} & =\frac{\frac{1}{10} \times 13}{1 \times 105}=\frac{1 \times 13}{1 \times 5} \\
=\frac{34}{3}=11 \frac{1}{3} & =\frac{13}{5}=2 \frac{3}{5}
\end{array}
$$

10.) $18 \times \frac{4}{33}$
12.) $220 \times \frac{15}{66}$
$\frac{6}{18}$
1 $\frac{4}{\frac{43}{11}}$

$$
=\frac{10}{10} \times \frac{5}{220} 1+\frac{+5}{-6633,31}
$$

$$
=\frac{24}{11}
$$

$$
=\frac{50}{1}
$$

$$
=2 \frac{2}{11}
$$

$$
=50
$$

In this exercise $\mathbf{Q 2}$, Q3, Q6, Q8, Q9, Q11 are homework.

