

Exercise - 9

1. A factory produces 13780 bulbs every day.

In 278 days, $(13780 \times 278) = 3830840$
bulbs will be produced.

$$\begin{array}{r} 13780 \\ \times 278 \\ \hline 110240 \\ 96460 \\ + 27560 \\ \hline 3830840 \end{array}$$

2. There are 125 apple trees in an orchard.
Each tree has 40 branches.

There are 20 apples on each branch.

\therefore There are $= \{ 125 \times (40 \times 20) \} = 100000$
apples in the orchard.

$$\begin{array}{r} 40 \\ \times 20 \\ \hline 80 \\ + 800 \\ \hline 800 \end{array}$$

$$\begin{array}{r} 125 \\ \times 800 \\ \hline 000 \\ 000 \\ + 1000 \\ \hline 100000 \end{array}$$

3. A building has 24 flats.
 Each flat has 4 rooms.
 Each room requires 132 floor tiles.

$$\begin{array}{r} 132 \\ \times 4 \\ \hline 528 \\ \\ 528 \\ \times 24 \\ \hline 2112 \\ + 1056 \\ \hline 12672 \end{array}$$

$\therefore \{ 24 \times (4 \times 132) \} = 12672$ tiles
 would be required for the building.

4. A poultry farm produced 1270080 eggs.
 It packs 144 eggs in a box.

$$\begin{array}{r} 8820 \\ 144 \overline{) 1270080} \\ \underline{-1152} \\ 1180 \\ \underline{-1152} \\ 288 \\ \underline{-288} \\ \times \end{array}$$

$\therefore \{ 1270080 \div 144 \} = 8820$ boxes are
 required to pack all the eggs.

5. The greatest number of 9 digits is
 99 99 99 999
 The greatest number of 3 digits is
 999.

$$\begin{array}{r} 1001001 \\ 999 \overline{) 999999999} \\ \underline{-999} \\ 999 \\ \underline{-999} \\ 999 \\ \underline{-999} \\ \times \end{array}$$

$\therefore (999999999 \div 999) = 1001001$

6. The product of two number is 127008.
 One of two number is 882.

$$\begin{array}{r} 144 \\ 882 \overline{) 127008} \\ \underline{-882} \\ 3880 \\ \underline{-3528} \\ 3528 \\ \underline{-3528} \\ \times \end{array}$$

\therefore The other number is $(127008 \div 882)$
 $= 144$

7. The least number of three digits is ~~100~~ 359
 The greatest number of three digits is ~~999~~ 953

\therefore The product of these two number is (953×359)
 ~~$(999 \times 100) = 99900$ which can be~~ $= 342127$

$$\begin{array}{r} 953 \\ \times 359 \\ \hline 8577 \\ 4765 \\ + 2859 \\ \hline 342127 \end{array}$$

8. The divisor = 241, quotient = 135,
remainder = 30

$$\begin{array}{r} 241 \\ \times 135 \\ \hline 1205 \\ 723 \\ \hline + 241 \\ \hline 32535 \\ + 30 \\ \hline 32565 \end{array}$$

$$\begin{aligned} \therefore \text{The dividend is} &= \{(241 \times 135) + 30\} \\ &= 32535 + 30 \\ &= 32565 \end{aligned}$$

9.

Two books contains 1395 and 2232 pages respectively.

Each chapter of the first book has 93 pages.

$$\begin{array}{r} 15 \\ 93 \overline{) 1395} \\ \underline{- 93} \\ 465 \\ \underline{- 465} \\ \times \end{array}$$

\therefore The first book has $(1395 \div 93) = 15$ chapters.

Each chapter of the second book has 124 pages.

$$\begin{array}{r} 18 \\ 124 \overline{) 2232} \\ \underline{- 124} \\ 992 \\ \underline{- 992} \\ \times \end{array}$$

\therefore The second book has $(2232 \div 124) = 18$ chapters.

$\therefore (18 - 15) = 3$ more chapters are there in one book than the other.

10.

A necklace has 3 strings of pearls.

Each string has 100 pearls.

Each packet of the pearls contains 120 pearls.

~~\therefore To make 13722 such necklace,~~

One necklace required $(100 \times 3) = 300$ pearls.

$$\begin{array}{r} 13722 \\ \times 300 \\ \hline 00000 \\ 00000 \\ + 41166 \\ \hline 4116600 \end{array}$$

\therefore To make 13722 such necklace, $(13722 \times 300) = 4116600$ pearls are required.

$$\begin{array}{r} 34305 \\ 120 \overline{) 4116600} \\ \underline{- 360} \\ 516 \\ \underline{- 480} \\ 366 \\ \underline{- 360} \\ 600 \\ \underline{- 600} \\ \times \end{array}$$

$\therefore (4116600 \div 120) = 34305$ packets of pearls are required.