

Example : Dividing 518 (Dividing whole number by decimal number)

$$\begin{array}{r} 0.7 \overline{) 518} \end{array}$$

Divisor Dividend

(It is difficult to solve)

- ♦ A divisor is a decimal number.
- ♦ First decimal number converts into the whole number.
- ♦ 0.7 convert into 7.
- ♦ In 0.7 number after a point, there is only one number than add zero in a dividend.

$$\begin{array}{r} 740 \\ 7 \overline{) 5180} \\ \underline{-49} \\ 028 \\ \underline{-28} \\ 000 \end{array}$$

$$\begin{array}{r} 0.7 \overline{) 518.000} \\ \underline{07} \\ \underline{00} \\ 7 \overline{) 5180} \end{array}$$

Q.1 Divide

1) $96 \div 0.3$

Ans :

$$\begin{array}{r} 320 \\ 3 \overline{) 960} \\ \underline{-9} \\ 06 \\ \underline{-6} \\ 00 \end{array}$$

$\therefore 96 \div 0.3 = 320$

$$\begin{array}{r} 0.3 \overline{) 96.00} \\ \underline{03} \\ \underline{00} \\ 3 \overline{) 960} \end{array}$$

2) $600 \div 0.6$

Ans :

$$\begin{array}{r} 1000 \\ 6 \overline{) 6000} \\ \underline{-6} \\ 0000 \end{array}$$

$\therefore 600 \div 0.6 = 1000$

$$\begin{array}{r} 0.6 \overline{) 600.00} \\ \underline{06} \\ \underline{00} \\ 6 \overline{) 6000} \end{array}$$

3) $800 \div 0.4$

Ans :

$$\begin{array}{r} 2000 \\ 4 \overline{) 8000} \\ \underline{-8} \\ 0000 \end{array}$$

$\therefore 800 \div 0.4 = 2000$

$$\begin{array}{r} 0.4 \overline{) 800.00} \\ \underline{04} \\ \underline{00} \\ 4 \overline{) 8000} \end{array}$$

4) $240 \div 0.8$

Ans :

$$\begin{array}{r} 300 \\ 8 \overline{) 2400} \\ \underline{-24} \\ 0000 \end{array}$$

$\therefore 240 \div 0.8 = 300$

$$\begin{array}{r} 0.8 \overline{) 240.00} \\ \underline{08} \\ \underline{00} \\ 8 \overline{) 2400} \end{array}$$

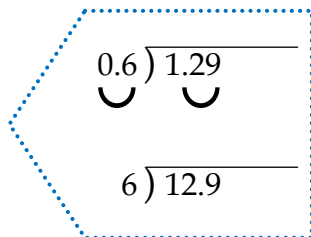


Notes :

5) $1.29 \div 0.6$

Ans :

$$\begin{array}{r} 2.15 \\ 6 \overline{) 12.9} \\ \underline{-12} \\ 009 \\ \underline{-6} \\ 030 \\ \underline{-30} \\ 00 \end{array}$$



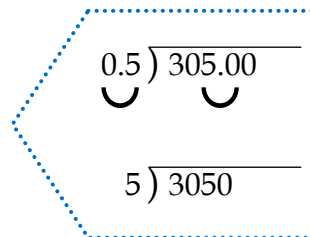
$$\begin{array}{r} 0.6 \overline{) 1.29} \\ \underline{0.6} \\ 0.69 \\ \underline{0.6} \\ 0.09 \\ \underline{0.06} \\ 0.030 \\ \underline{0.030} \\ 0.000 \end{array}$$

$\therefore 1.29 \div 0.6 = 2.15$

6) $305 \div 0.5$

Ans :

$$\begin{array}{r} 610 \\ 5 \overline{) 3050} \\ \underline{-30} \\ 005 \\ \underline{-5} \\ 00 \end{array}$$



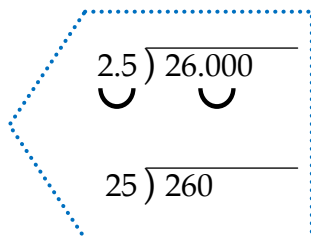
$$\begin{array}{r} 0.5 \overline{) 305.00} \\ \underline{0.5} \\ 0.00 \\ \underline{0.00} \\ 0.00 \\ \underline{0.00} \\ 0.000 \end{array}$$

$\therefore 305 \div 0.5 = 610$

7) $26 \div 2.5$

Ans :

$$\begin{array}{r} 10.4 \\ 25 \overline{) 260} \\ \underline{-25} \\ 010 \\ \underline{-0} \\ 0100 \\ \underline{-100} \\ 000 \end{array}$$



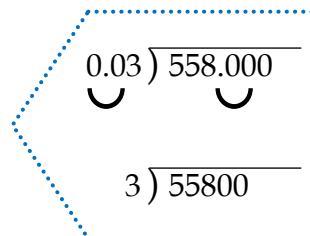
$$\begin{array}{r} 2.5 \overline{) 26.000} \\ \underline{2.5} \\ 0.00 \\ \underline{0.00} \\ 0.000 \end{array}$$

$\therefore 26 \div 2.5 = 10.4$

8) $558 \div 0.03$

Ans :

$$\begin{array}{r} 18600 \\ 3 \overline{) 55800} \\ \underline{-3} \\ 25 \\ \underline{-24} \\ 018 \\ \underline{-18} \\ 0000 \end{array}$$



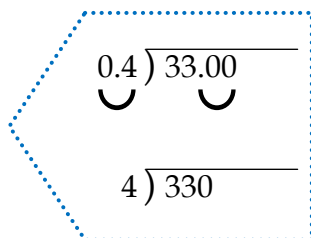
$$\begin{array}{r} 0.03 \overline{) 558.000} \\ \underline{0.03} \\ 0.00 \\ \underline{0.00} \\ 0.000 \end{array}$$

$\therefore 558 \div 0.03 = 18600$

9) $33 \div 0.4$

Ans :

$$\begin{array}{r} 82.5 \\ 4 \overline{) 330} \\ \underline{-32} \\ 010 \\ \underline{-8} \\ 20 \\ \underline{-20} \\ 00 \end{array}$$



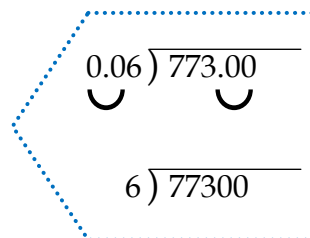
$$\begin{array}{r} 0.4 \overline{) 33.00} \\ \underline{0.4} \\ 0.00 \\ \underline{0.00} \\ 0.00 \end{array}$$

$\therefore 33 \div 0.4 = 82.5$

10) $773 \div 0.06$

Ans :

$$\begin{array}{r} 12883.33 \\ 6 \overline{) 77300} \\ \underline{-6} \\ 17 \\ \underline{-12} \\ 053 \\ \underline{-48} \\ 050 \\ \underline{-48} \\ 020 \\ \underline{-18} \\ 020 \\ \underline{-18} \\ 020 \end{array}$$



$$\begin{array}{r} 0.06 \overline{) 773.00} \\ \underline{0.06} \\ 0.00 \\ \underline{0.00} \\ 0.00 \end{array}$$

$\therefore 773 \div 0.06 = 12883.33$



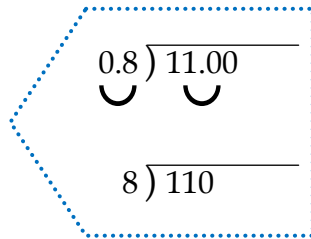
Notes :

11) $11 \div 0.8$

Ans :

$$\begin{array}{r} 13.75 \\ 8 \overline{) 110} \\ \underline{- 08} \\ 030 \\ \underline{- 24} \\ 060 \\ \underline{- 56} \\ 040 \\ \underline{- 40} \\ 00 \end{array}$$

$\therefore 11 \div 0.8 = 13.75$



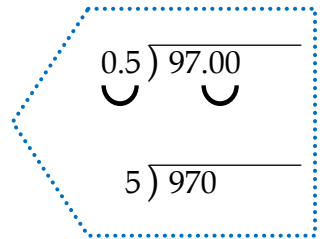
$$\begin{array}{r} 0.8 \overline{) 11.00} \\ \hline 8 \overline{) 110} \end{array}$$

12) $97 \div 0.5$

Ans :

$$\begin{array}{r} 194 \\ 5 \overline{) 970} \\ \underline{- 5} \\ 47 \\ \underline{- 45} \\ 020 \\ \underline{- 20} \\ 00 \end{array}$$

$\therefore 97 \div 0.5 = 194$



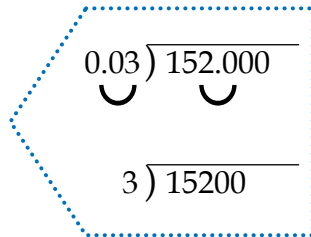
$$\begin{array}{r} 0.5 \overline{) 97.00} \\ \hline 5 \overline{) 970} \end{array}$$

13) $152 \div 0.03$

Ans :

$$\begin{array}{r} 5066.66 \\ 3 \overline{) 15200} \\ \underline{- 15} \\ 0020 \\ \underline{- 18} \\ 020 \\ \underline{- 18} \\ 020 \\ \underline{- 18} \\ 020 \\ \underline{- 18} \\ 2 \end{array}$$

$\therefore 26 \div 2.5 = 10.4$



$$\begin{array}{r} 0.03 \overline{) 152.000} \\ \hline 3 \overline{) 15200} \end{array}$$



Notes :

Dividing decimals by whole number

1) $1.29 \div 6$

Ans :

$$\begin{array}{r} 0.215 \\ 6 \overline{) 1.29} \\ \underline{-0} \\ 12 \\ \underline{-12} \\ 009 \\ \underline{-6} \\ 030 \\ \underline{-30} \\ 00 \end{array}$$

$\therefore 1.29 \div 6 = 0.215$

2) $8.4 \div 4$

Ans :

$$\begin{array}{r} 2.1 \\ 4 \overline{) 8.4} \\ \underline{-8} \\ 04 \\ \underline{-4} \\ 00 \end{array}$$

$\therefore 8.4 \div 4 = 2.1$

3) $494.16 \div 6$

Ans :

$$\begin{array}{r} 82.36 \\ 6 \overline{) 494.16} \\ \underline{-48} \\ 014 \\ \underline{-12} \\ 021 \\ \underline{-18} \\ 036 \\ \underline{-36} \\ 00 \end{array}$$

$\therefore 494.16 \div 6 = 82.36$

4) $9.48 \div 15$

Ans :

$$\begin{array}{r} 0.632 \\ 15 \overline{) 9.48} \\ \underline{-0} \\ 094 \\ \underline{-90} \\ 048 \\ \underline{-45} \\ 030 \\ \underline{-30} \\ 00 \end{array}$$

$\therefore 9.48 \div 15 = 0.632$

5) $7.70 \div 14$

Ans :

$$\begin{array}{r} 0.55 \\ 14 \overline{) 7.70} \\ \underline{-70} \\ 070 \\ \underline{-70} \\ 00 \end{array}$$

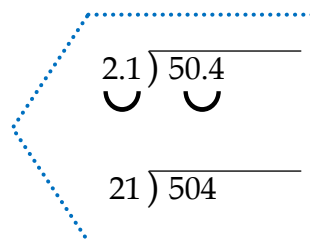
$\therefore 7.70 \div 14 = 0.55$

6) $50.4 \div 2.1$

Ans :

$$\begin{array}{r} 24 \\ 21 \overline{) 504} \\ \underline{-42} \\ 084 \\ \underline{-84} \\ 00 \end{array}$$

$\therefore 50.4 \div 2.1 = 24$



$$\begin{array}{r} 2.1 \overline{) 50.4} \\ 21 \overline{) 504} \end{array}$$



Notes :

7) $9.150 \div 3$

Ans :

$$\begin{array}{r} 3.050 \\ 3 \overline{) 9.150} \\ \underline{-9} \\ 015 \\ \underline{-15} \\ 000 \end{array}$$

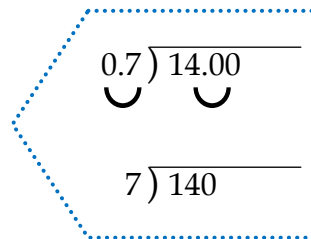
$\therefore 9.150 \div 3 = 3.050$

8) $0.7 \div 14$

Ans :

$$\begin{array}{r} 20 \\ 7 \overline{) 140} \\ \underline{-14} \\ 000 \\ \underline{-0} \\ 0 \end{array}$$

$\therefore 0.7 \div 14 = 20$



9) $23.67 \div 6$

Ans :

$$\begin{array}{r} 3.945 \\ 6 \overline{) 23.67} \\ \underline{-18} \\ 056 \\ \underline{-54} \\ 027 \\ \underline{-24} \\ 030 \\ \underline{-30} \\ 00 \end{array}$$

$\therefore 23.67 \div 6 = 3.945$

10) $4.32 \div 5$

Ans :

$$\begin{array}{r} 0.864 \\ 5 \overline{) 4.32} \\ \underline{-0} \\ 043 \\ \underline{-40} \\ 032 \\ \underline{-30} \\ 020 \\ \underline{-20} \\ 00 \end{array}$$

$\therefore 4.32 \div 5 = 0.864$

11) $0.21 \div 3$

Ans :

$$\begin{array}{r} 0.07 \\ 3 \overline{) 0.21} \\ \underline{-0} \\ 02 \\ \underline{-0} \\ 021 \\ \underline{-21} \\ 000 \end{array}$$

$\therefore 0.21 \div 3 = 0.07$

12) $0.056 \div 7$

Ans :

$$\begin{array}{r} 0.008 \\ 7 \overline{) 0.056} \\ \underline{-0} \\ 00 \\ \underline{-0} \\ 056 \\ \underline{-56} \\ 00 \end{array}$$

$\therefore 0.056 \div 7 = 0.008$



Notes :

13) $0.80 \div 10$

Ans :

$$\begin{array}{r} 0.08 \\ 10 \overline{) 0.80} \\ \underline{-0} \\ 080 \\ \underline{-80} \\ 000 \end{array}$$

$\therefore 0.80 \div 10 = 0.08$

14) $1.8 \div 6$

Ans :

$$\begin{array}{r} 0.3 \\ 6 \overline{) 1.8} \\ \underline{-0} \\ 018 \\ \underline{-18} \\ 00 \end{array}$$

$\therefore 1.8 \div 6 = 0.3$

Dividing decimals by whole number

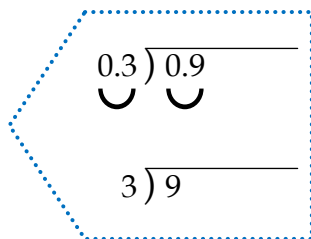
Q.1 Divide

1) $0.9 \div 0.3$

Ans :

$$\begin{array}{r} 3 \\ 3 \overline{) 9} \\ \underline{-9} \\ 0 \end{array}$$

$\therefore 0.9 \div 0.3 = 3$



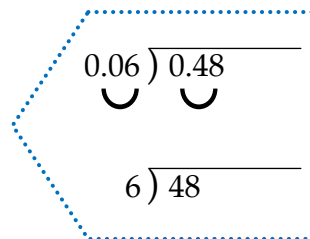
$$\begin{array}{r} 0.3 \overline{) 0.9} \\ \hline 3 \overline{) 9} \end{array}$$

2) $0.48 \div 0.06$

Ans :

$$\begin{array}{r} 08 \\ 6 \overline{) 48} \\ \underline{-0} \\ 48 \\ \underline{-48} \\ 00 \end{array}$$

$\therefore 0.48 \div 0.6 = 08$



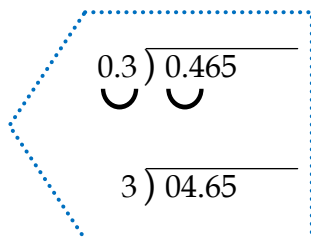
$$\begin{array}{r} 0.06 \overline{) 0.48} \\ \hline 6 \overline{) 48} \end{array}$$

3) $0.465 \div 0.3$

Ans :

$$\begin{array}{r} 1.55 \\ 3 \overline{) 04.65} \\ \underline{-3} \\ 016 \\ \underline{-15} \\ 015 \\ \underline{-15} \\ 000 \end{array}$$

$\therefore 0.465 \div 0.3 = 1.55$



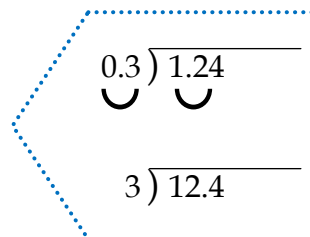
$$\begin{array}{r} 0.3 \overline{) 0.465} \\ \hline 3 \overline{) 4.65} \end{array}$$

4) $1.24 \div 0.3$

Ans :

$$\begin{array}{r} 4.133 \\ 3 \overline{) 12.4} \\ \underline{-12} \\ 004 \\ \underline{-3} \\ 010 \\ \underline{-9} \\ 010 \\ \underline{-9} \\ 01 \end{array}$$

$\therefore 1.24 \div 0.3 = 4.133$



$$\begin{array}{r} 0.3 \overline{) 1.24} \\ \hline 3 \overline{) 12.4} \end{array}$$



Notes :

Q.1 Solve the following word problems.

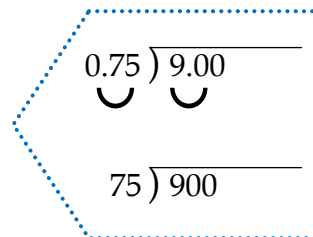
A] Benjamin has 9 cups of sugar. If this is $\frac{3}{4}$ of the number. He needs to make a cake, How many cups does he need?

Ans : $9 \div \frac{3}{4}$

 $= 9 \div 0.75$

$$\begin{array}{r} 12 \\ 0.75 \overline{) 9.00} \\ \underline{-75} \\ 150 \\ \underline{-150} \\ 000 \end{array}$$

$$\begin{array}{r} 0.75 \\ 4 \overline{) 3} \\ \underline{-0} \\ 30 \\ \underline{-28} \\ 020 \\ \underline{-20} \\ 00 \end{array}$$



$\therefore$ Benjamin needs 12 cups of sugar to make a cake.

B] Miguel cut the wire into 4 equal pieces. The wire was originally 7.88 meters long. How long is each piece?

Ans :
$$\begin{array}{r} 1.97 \\ 4 \overline{) 7.88} \\ \underline{-4} \\ 38 \\ \underline{-36} \\ 028 \\ \underline{-28} \\ 00 \end{array}$$

$\therefore$ 1.97 meters long each piece of wire.



Notes :