

Qn. 11

Convert $(55.625)_{10} = ()_2$?

വിട്ടു പോയത് പൂരിപ്പിക്കുക.

Ans First convert 55, for this do the following.

$$\begin{array}{r|l}
 2 & 55 \\
 \hline
 & 27 - 1 \\
 \hline
 & 13 - 1 \\
 \hline
 & 6 - 1 \\
 \hline
 & 3 - 0 \\
 \hline
 & 1 - 1
 \end{array}$$

Write down the remainders from bottom to top.

$$(55)_{10} = (110111)_2$$

Next convert 0.625, for this do the following.

Fractional part	Result	Integer Part
0.625×2	$= 1.250$	1
0.250×2	$= 0.50$	0
0.50×2	$= 1.0$	1

Write down the remainder from top to bottom.

So the answer is

$$(55.625)_{10} = (110111.101)_2$$

Write down the remainders from top to bottom.

So the answer is

$$(55.625)_{10} = (110111.101)_2$$

Qn. 12

Convert $(55.140625)_{10} = ()_8$?

വിട്ടു പോയത് പൂരിപ്പിക്കുക.

Ans First convert 55, for this do the following.

$$\begin{array}{r|l}
 8 & 55 \\
 \hline
 & 6 - 7
 \end{array}$$

Write down the remainders from bottom to top.

$$(55)_{10} = (67)_8$$

Next convert 0.140625, for this do the following.

Fractional part	Result	Integer Part
0.140625×8	$= 1.125$	1
0.125×8	$= 1.0$	1

Write down the remainders from top to bottom.

So the answer is

$$(55.140625)_{10} = (67.11)_8$$

Qn. 13

$(55.515625)_{10} = ()_{16}$

വിട്ടു പോയത് പൂരിപ്പിക്കുക.

Ans First convert 55, for this do the following.

$$\begin{array}{r|l}
 16 & 55 \\
 \hline
 & 3 - 7
 \end{array}$$

Write down the remainders from bottom to top.

$$\text{ie. } (55)_{10} = (37)_{16}$$

Next convert .515625

Fractional part	Result	Integer Part
$.515625 \times 16$	$= 8.25$	8
0.25×16	$= 4.0$	4

So the answer is

$$(55.515625)_{10} = (37.84)_{16}$$