Hexadecimal Number Conversion

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Number Systems: Hexadecimal Numbers

- Express the decimal number **4591** as a hexadecimal number.

- Express the hexadecimal number **F5F1** as a decimal number.

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591				

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286		

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15 (0.9375 x 16)	F

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286				

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286	17.875	17		

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286	17.875	17	14 (0.875 x 16)	E

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286	17.875	17	14	E
17	1.0625	1	1 (0.0625 x 16)	1

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286	17.875	17	14	E
17	1.0625	1	1	1
1	0.0625	0	1 (0.0625 x 16)	1
		(Finished)		

Converting from Decimal to Hexadecimal using the repeated division method.

Number	Division by 16	Quotient	Remainder (Decimal)	Remainder (Hexadecimal)
4591	286.9375	286	15	F
286	17.875	17	14	E
17	1.0625	1	1	1
1	0.0625	0	1	1
			ANSWER:	**11EF**

Hexadecimal Numbers

- Express the decimal number **4591** as a hexadecimal number.

  – Correct Answer: **11EF**

- Express the hexadecimal number **F5F1** as a decimal number.

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1			
F	15			
5	5			
F	15			

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	
F	15	1	$16^1=16$	
5	5	2	$16^2=256$	
F	15	3	$16^3=4096$	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	1	
F	15	1	16	
5	5	2	256	
F	15	3	4096	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	
5	5	2	$16^2=256$	
F	15	3	$16^3=4096$	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	240
5	5	2	$16^2=256$	
F	15	3	$16^3=4096$	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	240
5	5	2	$16^2=256$	1280
F	15	3	$16^3=4096$	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	240
5	5	2	$16^2=256$	1280
F	15	3	$16^3=4096$	61440

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	240
5	5	2	$16^2=256$	1280
F	15	3	$16^3=4096$	<u>61440</u>
			SUM =	

Converting from Hexadecimal to Decimal.
(F5F1)

Hexit	Decimal Equivalent	Power	Weighting	Product
1	1	0	$16^0=1$	1
F	15	1	$16^1=16$	240
5	5	2	$16^2=256$	1280
F	15	3	$16^3=4096$	<u>61440</u>
			SUM =	**62961**

Hexadecimal Numbers

- Express the decimal number **4591** as a hexadecimal number.

  – Correct Answer: **11EF**

- Express the hexadecimal number **F5F1** as a decimal number.

  – Correct Answer: **62961**