

		Exponent			Fraction		Value		
Description	Bit representation	exp	E	$2^E$	frac	M	$M \cdot 2^E$	V	Decimal
zero	0 000 00	0	-2	$1/4$	$0/4$	$0/4$	$0/16$	0	0
Smallest positive denormalized	0 000 01	0	-2	$1/4$	$1/4$	$1/4$	$1/16$	$1/16$	0.0625
	0 000 10	0	-2	$1/4$	$2/4$	$2/4$	$2/16$	$1/8$	0.125
Largest positive denormalized	0 000 11	0	-2	$1/4$	$3/4$	$3/4$	$3/16$	$3/16$	0.1875
Smallest positive normalized	0 001 00	1	-2	$1/4$	$0/4$	$4/4$	$4/16$	$1/4$	0.25
	0 001 01	1	-2	$1/4$	$1/4$	$5/4$	$5/16$	$5/16$	0.3125
	0 001 10	1	-2	$1/4$	$2/4$	$6/4$	$6/16$	$3/8$	0.375
	0 001 11	1	-2	$1/4$	$3/4$	$7/4$	$7/16$	$7/16$	0.4375
	0 010 00	2	-1	$1/2$	$0/4$	$4/4$	$4/8$	$1/2$	0.5
	0 010 01	2	-1	$1/2$	$1/4$	$5/4$	$5/8$	$5/8$	0.625
	0 010 10	2	-1	$1/2$	$2/4$	$6/4$	$6/8$	$3/4$	0.75
	0 010 11	2	-1	$1/2$	$3/4$	$7/4$	$7/8$	$7/8$	0.875
One	0 011 00	3	0	1	$0/4$	$4/4$	$4/4$	1	1.0

	0 011 01	3	0	1	1/4	5/4	5/4	5/4	1.25
	0 011 10	3	0	1	2/4	6/4	6/4	3/2	1.5
	0 011 11	3	0	1	3/4	7/4	7/4	7/4	1.75
	0 100 00	4	1	2	0/4	4/4	2	2	2.0
	0 100 01	4	1	2	1/4	5/4	10/4	5/2	2.5
	0 100 10	4	1	2	2/4	6/4	12/4	3	3.0
	0 100 11	4	1	2	3/4	7/4	14/4	7/2	3.5
	0 101 00	5	2	4	0/4	4/4	16/4	4	4.0
	0 101 01	5	2	4	1/4	5/4	20/4	5	5.0
	0 101 10	5	2	4	2/4	6/4	24/4	6	6.0
	0 101 11	5	2	4	3/4	7/4	28/4	7	7.0
	0 110 00	6	3	8	0/4	4/4	32/4	8	8.0
	0 110 01	6	3	8	1/4	5/4	40/4	10	10.0
	0 110 10	6	3	8	2/4	6/4	48/4	12	12.0
Largest positive normalized	0 110 11	6	3	8	3/4	7/4	56/4	14	14.0

+ Infinity								$\infty$	
NaN	<b>Bonus: 0.5 marks!</b> 0 111 11							NaN	