

Q.3. Express the following numbers in IEEE 32-bit floating-point format (shown below), and perform the subtraction operation A-B:

(i) A=15.5

(ii) B=16.25

Number	Sign	Biased Exponent	Fraction	Value
Positive normalized nonzero	0	$0 < e < 255$	f	$2^{e-127} (1.f)$
Negative normalized nonzero	1	$0 < e < 255$	f	$-2^{e-127} (1.f)$
Positive denormalized nonzero	0	0	f=0	$2^{e-126} (0.f)$
Negative denormalized nonzero	1	0	f=0	$-2^{e-126} (0.f)$