AIM:

To find focal length of a concave mirror using u and v graph.

APPARATUS:

An optical bench, concave mirror, mirror holder, 2 optical needle, knitting needle, half meter scale.

THEORY/WORKING FORMULA:

Mirror formula $\Rightarrow \frac{1}{f} = \frac{1}{v} + \frac{1}{u}$

OBSERVATION:

ROUGH FOCAL LENGTH OF CONCAVE MIRROR:_____

Observation Table:

S. No.	Position of: (cm)			*u (cm)*	*v (cm)*	*1/v (cm^{-1})*	*1/u (cm^{-1})*
	Object needle	Lens	Image needle				
1							
2							
3							
4							
5							
6							

Calculations for focal length {table}

S.NO.	-u	v	$f=\frac{uv}{u+v}$
1.			
2.			
3.			
4.			
5.			
6.