Free body diagram

Example-1
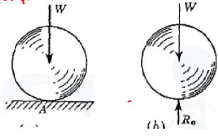
Example -2
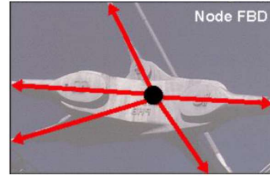
Example -3
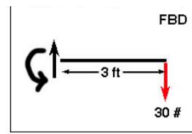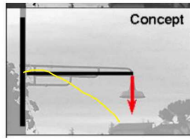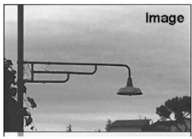
Resolution of Force

Method of project.

F_y, $F \sin(\alpha)$

f_x, $F \cos(\alpha)$
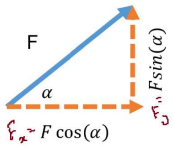
$F_x = $ Hz comp of F

$F_y = $ vt comp of F

$|F| = \sqrt{F_x^2 + F_y^2}$
$\downarrow$ magnitude of F

$\tan(\alpha) = \dfrac{F_y}{F_x}$

60 N   40°

60 N $F_{vert}=38.6$ N   40° $F_{horiz}=45.9$ N
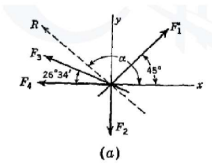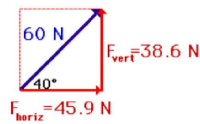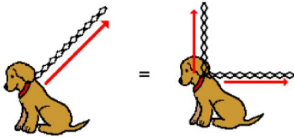
Force	(Mag.) lb
F_1	150
F_2	100
F_3	120
F_4	80

(a)

Surprise test #1

Submit in pdf (from word or Latex)

Due by 5:20 pm today

Marks #|2

Find 'R' & 'α'

if found copying you will get zero marks