The Force of Tension and Systems (FT):

For each of the following find the force of tension in terms of: *m, M, g, θ, φ, μ, F, a*

1. 2.

θ

m

**F**

m

(FT < mg)

3. 4.

m

**a**

m

m

**a**

5.

μ > 0

m

**a**

6.

7.

m

**a < g**

8. Write a system of equations that could be used to find both

**Ft1** and **FT2** in terms of M, g, θ,φ

φ

θ

M

Systems:

Find FT for each of the following. Give the answer in terms of m, m1, m2, m3,, M, g, μ, F and θ**.**

1. 2.

a

M

m

F

M

m

F

3. μ>0

4.

m1

m1

5.

m1

m2

m2 < m1

m

μ=0

θ

M

7.

m

6.

T1 T2

m2

m1

m3

F

m

M

8.

μ > 0

**a**

9.

Find Ff on top block

m

F>Ff1

M

μ1 >0