

PHYSLETS ANSWER SHEET

FS1A4

Forces / Set 1 / Animation 4

Name _____ Class _____

<Show all work on calculations. Include proper units. Explanations require complete sentences.>

1) Draw and label a free body diagram showing all forces acting on the tree

2) Write an equation for the sum of the forces on the palm tree in the x-direction.

3) Write an equation for the sum of the forces in the y-direction.

4) If the mass of the tree is 2100kg, and the coefficient of kinetic friction is .30, calculate the tension F_T in the rope attached to Dumbo.