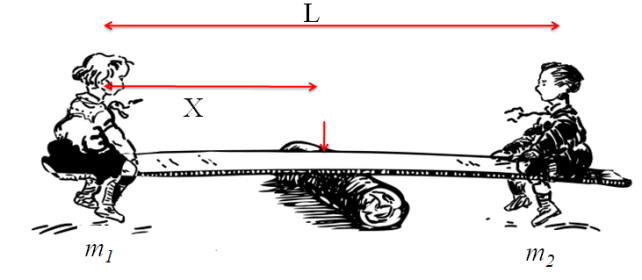
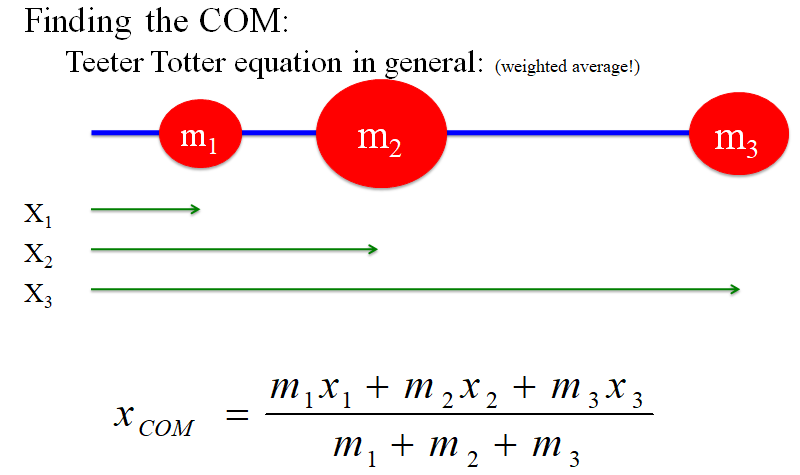
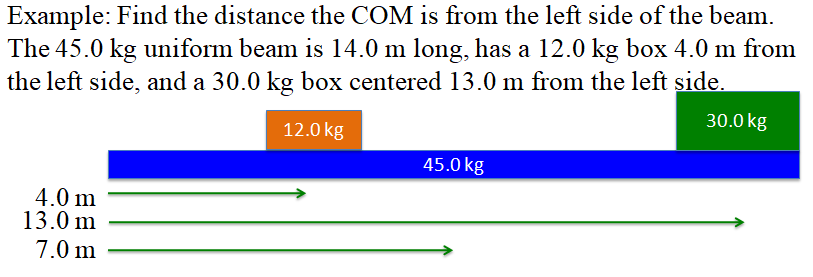
**Noteguide for Center of Mass (Videos 9E) Name**



Whiteboards: (Skip #2, unless you don't want to)

|  |  |
| --- | --- |
| 1. The center of the 5.00 kg is 34.0 cm from the center of the 2.00 kg. How far from the 5.00 kg center is the COM? (hint: X5kg = 0)  (9.71 cm) | 3. A uniform meter stick has a mass of 85.0 grams, and I place a 15.0 gram clamp at the 24.0 cm mark, and the 55.0 cm mark. At what mark would it balance? (Assume the meter stick to have a COM at 50.0 cm)  (47.3 cm) |
| 4. A uniform meter stick has a mass of 116 grams, and has a 24.0 g mass at the 40.0 cm mark. Where do you clamp a 32.0 g mass to make it balance at the 42.0 cm mark?  (14.5 cm) | 5. A uniform meter stick has a mass of 95.0 grams, and has a 12.0 g mass at the 13.0 cm mark. What mass do you put at the 85.0 cm mark to make it balance at the 56.0 cm mark?  (37.4 g) |