27 cm

2g

M2 = 11(27 – x)

**3g**

Using the fact that M1 = M2, solve for x.

x

27 – x

M1 = 2(x)

8g

31 cm

31 – x

M2 = \_\_\_\_\_\_\_\_\_\_\_

3.8 g

**4.5g**

Using the fact that M1 = M2, solve for x.

x

M1 = \_\_\_\_\_\_\_\_\_\_\_\_\_

2.3g

|  |  |
| --- | --- |
| Moment | Measure of the tendency of a force to cause a body to rotate about a specific point  Clockwise rotation is positive.  Counterclockwise rotation is negative.  Moment = Force x Distance  Moments for our mobiles will be expressed in gram-centimeters. |
| Force | Mass of ornament group in grams. |
| Distance | Distance of moment arm or perpendicular distance between the line of action of the force and the point of rotation. |
| Point of Rotation (Fulcrum) | The reference point about which the force is considered as causing rotation. |

20 cm

M2 = 10x

M1 = 5(20 – x)

Using the fact that M1 = M2, solve for x.

5g

5g

5g

x

20 – x