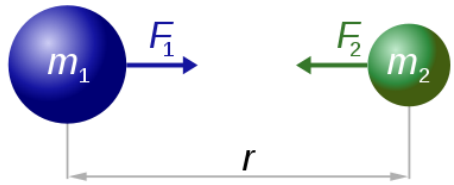
Problem statement

Formula



$$F_1 = F_2 = G\frac{m_1 \times m_2}{r^2}$$

G= gravity constant = 6.67×10^{-11}
m1 and m2 are the masses
r is the distance

Solution

```
#pragma strict
var mass1 :float;
var mass2 :float;
function GravityForce (test: Transform): float {
var range : float = transform.position.x - test.position.x ;
var gravity : float = Physics2D.gravity.magnitude;
var force: float = (mass1*mass2)/(range*range);
return force;;
}
```

Notes

I had several problems because it was no possible to multiply transform with float, so to calculate the distance between the two objects I used “test: Transform”, where the transform.position.x is the position of the object with mass2 and test.position.x is the position of the object with mass1.

Task	Date	Start	End
Write out problem statement			
Research formula			
Program the solution	11/05/14	16:10	16:40
Test the solution	11/05/14	16:40	17:15
Write up the solution	11/05/14	17:15	17:20