



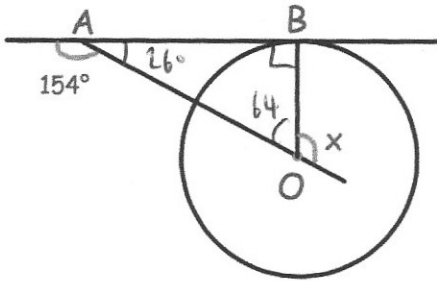
Make m the subject of

$$9m + 4c = 2(a + 3m)$$

$$9m + 4c = 2a + 6m$$

$$3m = 2a - 4c$$

$$m = \frac{2a - 4c}{3}$$



Find x

$$180 - 64 = 116^\circ$$

Object A has a density 8 times that of object B.

The volume of object A is twice the volume of object B.

The mass of object A is 16 times the mass of object B

$$d \times v$$

$$m = d \times v$$

$$8x \times 2y = 16xy$$

Expand and simplify

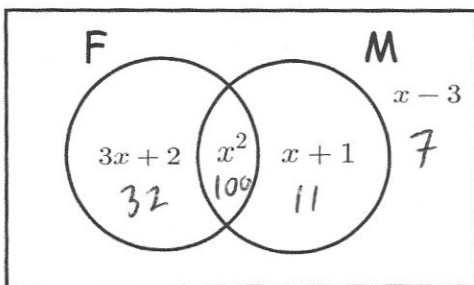
$$(x + 2)(2x - 1)^2$$

$$(x + 2)(4x^2 - 4x + 1)$$

$$4x^3 - 4x^2 + x + 8x^2 - 8x + 2$$

$$= 4x^3 + 4x^2 - 7x + 2$$

ξ



ξ = 150 stamps in a collection

F = French stamps

M = Modern stamps

Find how many Modern French there are in the collection.

$$x^2 + 3x + 2 + x + 1 + x - 3 = 150$$

$$x^2 + 5x = 150$$

$$x = 10$$

$$x^2 + 5x - 150 = 0$$

$$x = -15 \times$$

$$(x + 15)(x - 10) = 0$$

$$\boxed{100}$$