## ●例題

 $=-\frac{5}{12}$  m

 $=\frac{28}{12}$  m

求出圖 10.5 中四個點質量的質心所在。

總質量
$$M = 12 \text{ kg}$$
,由  $10.2$  式得:

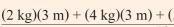
$$r = \frac{(2 \text{ kg})(3 \text{ m}) + (4 \text{ kg})(3 \text{ m}) + (4 \text{ kg})(3 \text{ m})}{(4 \text{ kg})(3 \text{ m})}$$

故質心位置為 -0.42i + 2.3j m。

$$(4 \text{ kg})(3 \text{ m}) + (4 \text{ kg})(3 \text{ m})$$

$$(xg)(3 m) + (4 kg)(3 m) + (3 m) + (3 m)$$

$$\frac{\text{kg}(3 \text{ m}) + (4 \text{ kg})(3 \text{ m}) + (4 \text{ kg})(3 \text{ m})}{12.1}$$



$$x_{\text{CM}} = \frac{(2 \text{ kg})(3 \text{ m}) + (4 \text{ kg})(3 \text{ m}) + (5 \text{ kg})(-4 \text{ m}) + (1 \text{ kg})(-3 \text{ m})}{12 \text{ kg}}$$

$$y_{\text{CM}} = \frac{(2 \text{ kg})(-1 \text{ m}) + (4 \text{ kg})(3 \text{ m}) + (5 \text{ kg})(4 \text{ m}) + (1 \text{ kg})(-2 \text{ m})}{12 \text{ kg}}$$

$$m_1$$



















