

Rectangulo

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• Ejercicio 1

Datos

$b = 8 \text{ cm}$, $h = 13 \text{ cm}$

Formulas

$$I_x = (b \cdot h^3) / 12 = (8)(13^3) / 12 = 1,464.66$$

$$I_y = (h \cdot b^3) / 12 = (13)(8^3) / 12 = 554.66$$

• Ejercicio 2

Datos

$b = 14 \text{ cm}$, $h = 10 \text{ cm}$

$$I_x = (14)(10^3) / 12 = 1,166.666 \text{ cm}^2$$

$$I_y = (10)(14^3) / 12 = 2,286.666 \text{ cm}^2$$

• Ejercicio 3

Datos

$b = 15 \text{ cm}$, $h = 12 \text{ cm}$

$$I_x = (15)(12^3) / 12 = 2,160 \text{ cm}^2$$

$$I_y = (12)(15^3) / 12 = 3,375 \text{ cm}^2$$

• Ejercicio 4

Datos

$b = 12 \text{ cm}$, $h = 9 \text{ cm}$

$$I_x = (12)(9^3) / 12 = 729 \text{ cm}^2$$

$$I_y = (9)(12^3) / 12 = 1,296$$

• Ejercicio 5

Datos

$b = 14 \text{ cm}$, $h = 10 \text{ cm}$

$$I_x = (14)(10^3) / 12 = 1,166.666 \text{ cm}^2$$

$$I_y = (10)(14^3) / 12 = 2,286.666 \text{ cm}^2$$

• Ejercicio 6

Datos

$b = 14 \text{ cm}$, $h = 12 \text{ cm}$

$$I_x = (14)(12^3) / 12 = 2,016 \text{ cm}^2$$

$$I_y = (12)(14^3) / 12 = 2,744 \text{ cm}^2$$

• Ejercicio 7

$b = 11 \text{ cm}$, $h = 3 \text{ cm}$

$$I_x = (11)(3^3) / 12 = 24.75 \text{ cm}^2$$

$$I_y = (3)(11^3) / 12 = 332.75 \text{ cm}^2$$

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• Ejercicio 1

Datos

$$R = 8 \text{ cm}$$

Formula

$$I_x = (\pi \cdot r^4) / 4 = (\pi) (8^4) / 4 = 3,216.9903 \text{ cm}^2$$

$$I_y = (\pi \cdot r^4) / 4 = (\pi) (8^4) / 4 = 3,216.9903 \text{ cm}^2$$

• Ejercicio 2

Datos

$$R = 18 \text{ cm}$$

Formula

$$I_x = (\pi) (18^4) / 4 = 82,447.9576 \text{ cm}^2$$

$$I_y = 82,447.9576 \text{ cm}^2$$

• Ejercicio 3

Datos

$$R = 28 \text{ cm}$$

$$I_x = (\pi) (28^4) / 4 = 482,749.6935$$

$$I_y = 482,749.6935$$

• Ejercicio 4

Datos

$$R = 9 \text{ cm}$$

$$I_x = (\pi) (9^4) / 4 = 201.0619 \text{ cm}^2$$

$$I_y = 201.0619 \text{ cm}^2$$

• Ejercicio 5

Datos

$$R = 3 \text{ cm}$$

$$I_x = (\pi) (3^4) / 4 = 63.61725 \text{ cm}^2$$

$$I_y = 63.61725 \text{ cm}^2$$

• Ejercicio 6

Datos

$$R = 10 \text{ cm}$$

$$I_x = (\pi) (10^4) / 4 = 7,853.981 \text{ cm}^2$$

$$I_y = 7,853.981 \text{ cm}^2$$

• Ejercicio 7

Datos

$$R = 7 \text{ cm}$$

$$I_x = (\pi) (7^4) / 4 = 1,885.740 \text{ cm}^2$$

$$I_y = 1,885.740 \text{ cm}^2$$

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• Ejercicio 1

Datos Formula

$$r = 3 \text{ cm} \quad I_x = (\pi r^4) / 8 = (\pi (3^4)) / 8 = 31.8086 \text{ cm}^2$$

• Ejercicio 2

Datos $I_x = (\pi r^4) / 8 = 1.608.4954 \text{ cm}^2$

$$r = 8 \text{ cm}$$

• Ejercicio 3

Datos $I_x = (\pi r^4) / 8 = 942.870 \text{ cm}^2$

$$r = 7 \text{ cm}$$

• Ejercicio 4

Datos $I_x = (\pi r^4) / 8 = 32.792.62$

$$r = 17 \text{ cm}$$

• Ejercicio 5

Datos $I_x = (\pi r^4) / 8 = 11.215.876 \text{ cm}^2$

$$r = 13 \text{ cm}$$

• Ejercicio 6

Datos $I_x = (\pi r^4) / 8 = 100.530 \text{ cm}^2$

$$r = 4 \text{ cm}$$

• Ejercicio 7

Datos

$$I_x = (\pi r^4) / 8 = 245.436 \text{ cm}^2$$

$$r = 5 \text{ cm}$$

Cuarto Lázaro Guillén Jesús Eduardo

• Ejercicio 1

Datos

Formula

$$r = 5 \text{ cm}$$

$$I_x = 0.055 \cdot r^4 = (0.055) (5^4) = 34.375 \text{ cm}^2$$

$$I_y = 34.375 \text{ cm}^2$$

• Ejercicio 2

Datos

$$I_x = (0.055) (15^4) = 2,784.375 \text{ cm}^2$$

$$r = 15 \text{ cm}$$

$$I_y = 2,784.375 \text{ cm}^2$$

• Ejercicio 3

Datos

$$I_x = (0.055) (9^4) = 360.855 \text{ cm}^2$$

$$r = 9 \text{ cm}$$

$$I_y = 360.855 \text{ cm}^2$$

• Ejercicio 4

Datos

$$I_x = (0.055) (25^4) = 21,989.375 \text{ cm}^2$$

$$r = 25 \text{ cm}$$

$$I_y = 21,989.375 \text{ cm}^2$$

• Ejercicio 5

Datos

$$I_x = (0.055) (7^4) = 132.055 \text{ cm}^2$$

$$r = 7 \text{ cm}$$

$$I_y = 132.055 \text{ cm}^2$$

• Ejercicio 6

Datos

$$I_x = (0.055) (9^4) = 360.855 \text{ cm}^2$$

$$r = 9 \text{ cm}$$

$$I_y = 360.855 \text{ cm}^2$$

• Ejercicio 7

Datos

$$I_x = (0.055) (2^4) = 0.88 \text{ cm}^2$$

$$r = 2 \text{ cm}$$

$$I_y = 0.88 \text{ cm}^2$$

TRIANGULO Lázaro Cuillén Jesús Eduardo

• Ejercicio 1

Datos

$$b = 15 \text{ cm}, h = 10 \text{ cm}$$

Formula

$$I_x = (b \cdot h^3) / 36 = ((15)(10^3)) / 36 = 416.66 \text{ cm}^2$$

$$I_y = (h \cdot b^3) / 48 = ((10)(15^3)) / 48 = 703.125 \text{ cm}^2$$

• Ejercicio 2

Datos

$$b = 5 \text{ cm}, h = 3 \text{ cm}$$

$$I_x = ((5)(3^3)) / 36 = 3.75 \text{ cm}^2$$

$$I_y = ((3)(5^3)) / 48 = 7.8125$$

• Ejercicio 3

Datos

$$b = 15 \text{ cm}, h = 14 \text{ cm}$$

$$I_x = ((15)(14^3)) / 36 = 1,143.333 \text{ cm}^2$$

$$I_y = ((14)(15^3)) / 48 = 989.375 \text{ cm}^2$$

• Ejercicio 4

Datos

$$b = 12 \text{ cm}, h = 9 \text{ cm}$$

$$I_x = ((12)(9^3)) / 36 = 243$$

$$I_y = ((9)(12^3)) / 48 = 324 \text{ cm}^2$$

Ejercicio 7

Datos

$$b = 6 \text{ cm}, h = 9 \text{ cm}$$

$$I_x = ((6)(9^3)) / 36 = 121.5 \text{ cm}^2$$

• Ejercicio 5

Datos

$$b = 13 \text{ cm}, h = 15 \text{ cm}$$

$$I_x = ((13)(15^3)) / 36 = 1,218.75 \text{ cm}^2$$

$$I_y = ((15)(13^3)) / 48 = 686.56 \text{ cm}^2$$

• Ejercicio 6

Datos

$$b = 3 \text{ cm}, h = 15 \text{ cm}$$

$$I_x = ((3)(15^3)) / 36 = 281.25 \text{ cm}^2$$

$$I_y = ((15)(3^3)) / 48 = 8.4375 \text{ cm}^2$$