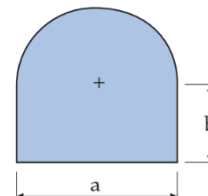## Opgave 335

$$O = 5$$

Find formel for areal

$$A = A_1 + A_2$$

$$A_1 = a \cdot b$$

$$A_2 = \pi \left(\frac{a}{2}\right)^2$$

$$A_2 = \pi \frac{a^2}{4}$$

$$A = ab + \pi \frac{a^2}{4}$$

Find formel for omkreds

$$O = O_1 + O_2$$

$$O_1 = a + 2b$$

$$O_2 = \pi \cdot a$$

Isoler b

$$O = a + 2b + \pi a$$
$$5 = a + 2b + \pi a$$
$$2b = a + \pi a - 5$$
$$b = \frac{a + \pi a - 5}{2}$$

Indsæt på b plads

$$A(a) = a \cdot \frac{a + \pi a - 5}{2} + \pi \frac{a^2}{4}$$

Reducer

$$A(a) = \frac{a(a + \pi a - 5)}{2} \cdot \frac{\pi a^2}{4}$$