1.

a)

$_1\int^3$ f(x) $\frac{3}{4}x^2 + 1$ dx = $[3/12x^3+x+C]^3_1$ = $(3/12 * 3^3 + 3 + C) - (3/12 * 1^3 + 1 + C)$

= 8,5cm²

b)

$_{-2}\int^1$ g(x) $- x^2 - 2x + 4$ dx = $[-1/3x^3 - x^2 + 4x+C]^1_{-2}$

= $(-1/3*1^3 - 1^2 + 4*1+C) – (-1/3*(-2)^3 - (-2)^2 + 4*(-2)+C)$ = 6/2/3cm²

c)

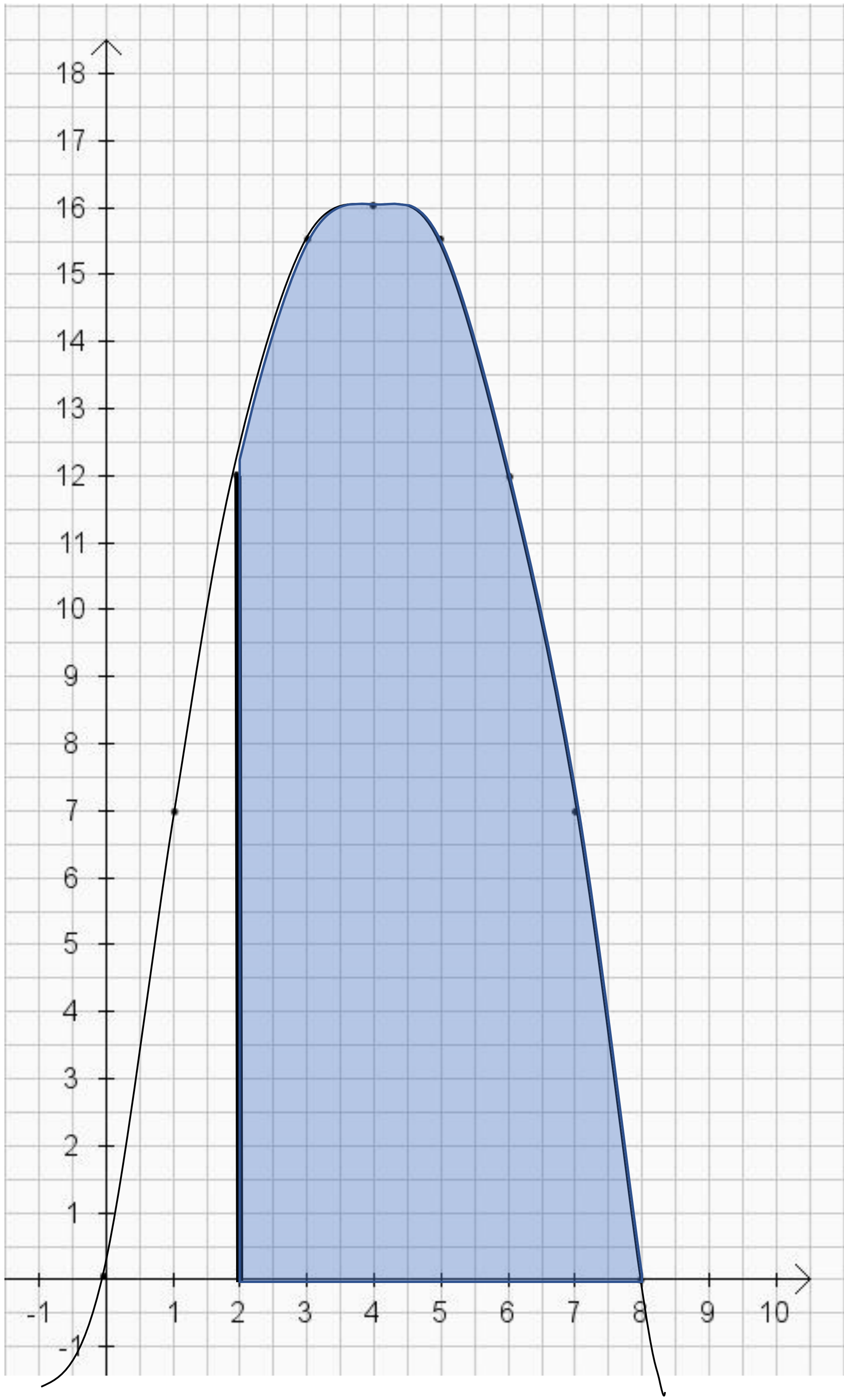
$_{-2}\int^2$ h(x) $-x^4 +3x^2 +4$ dx = $[-1/5x^5 + x^3 + 4x + C]^2_{-2}$

= $(-1/5*2^5 + 2^3 + 4*2+C) – (-1/5*(-2)^5 + (-2)^3 + 4*(-2)+C)$

= 0cm²

2.

$-x^2 + 8x$



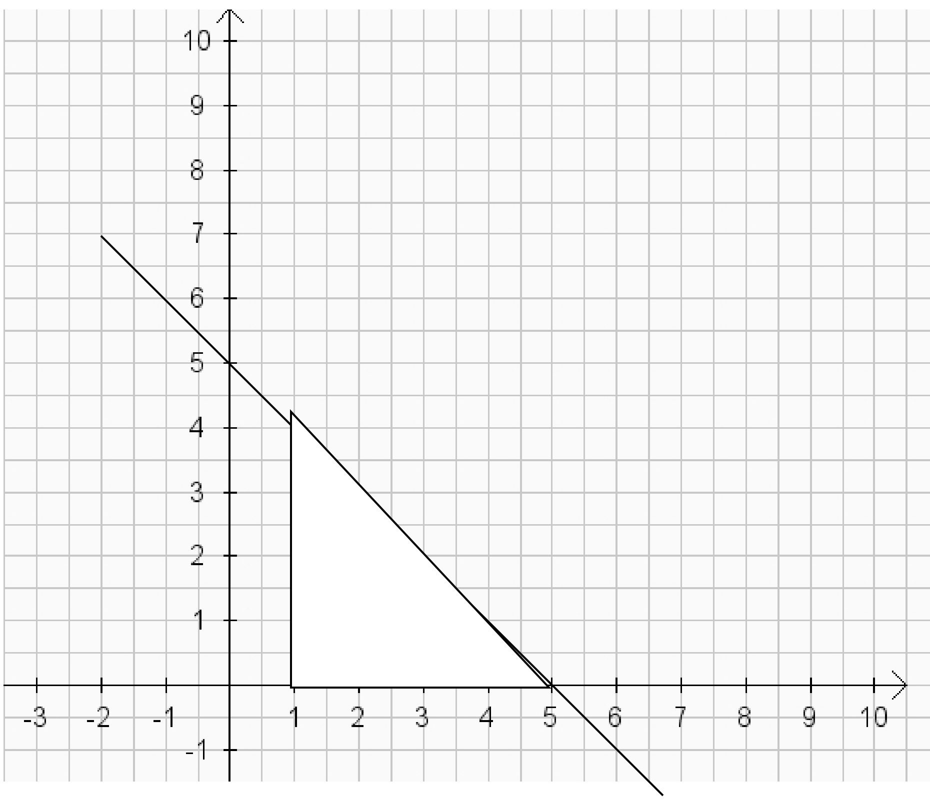
$_2\int^8 f(x)\ -x^2 + 8x \quad dx = [-1/3x^3+4x^2+C]^8_2$

$= (-1/3*8^3+4*8^2+C) - (-1/3*2^3+4*2^2+C) = 72cm^2$

3.

a)

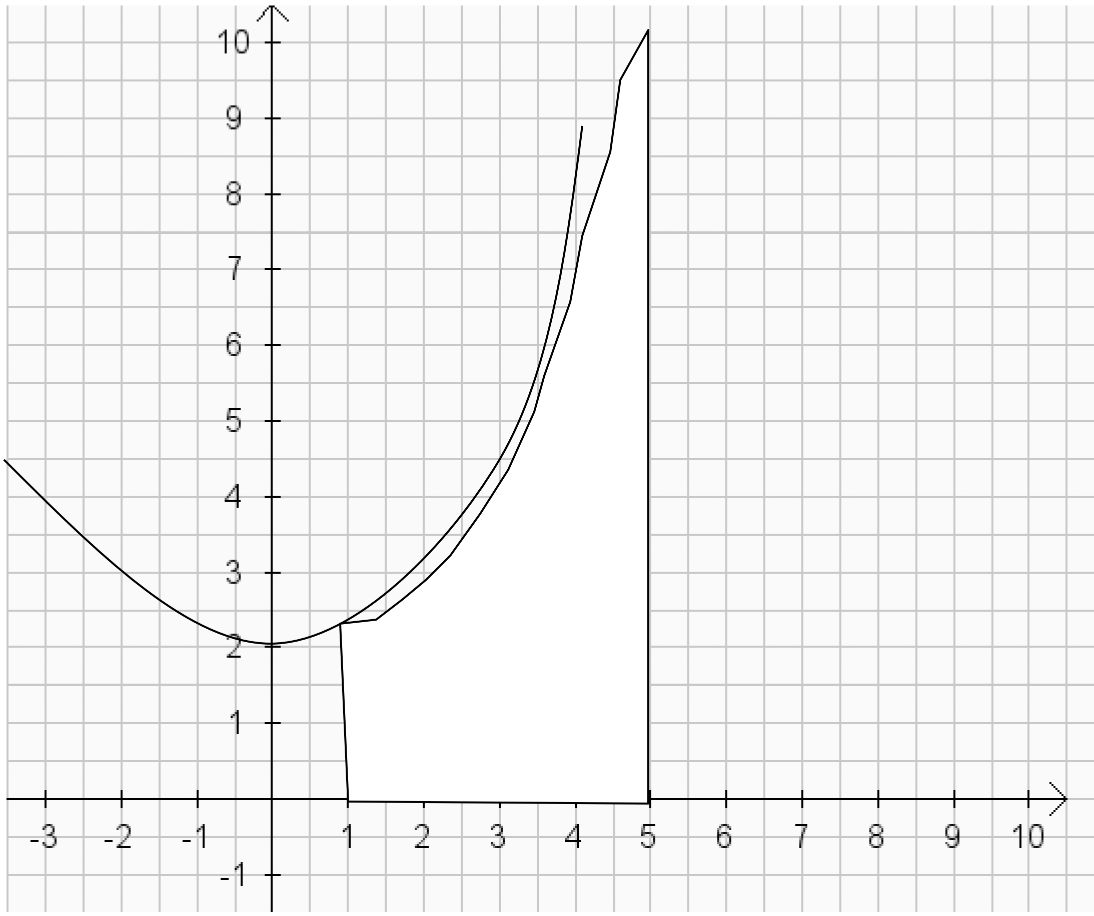
$_1\int^5$ f(x) = -x+5 dx = $[-1/2x^2+5x]^5_1$ $= (-1/2*5^2+5*5) – (-1/2*1^2+5x*1)$
$= 8cm^2$



b)

$_1\int^5$ f(x) = 0,2x² +2 dx = [1/15x³ +2x]$^5_1$

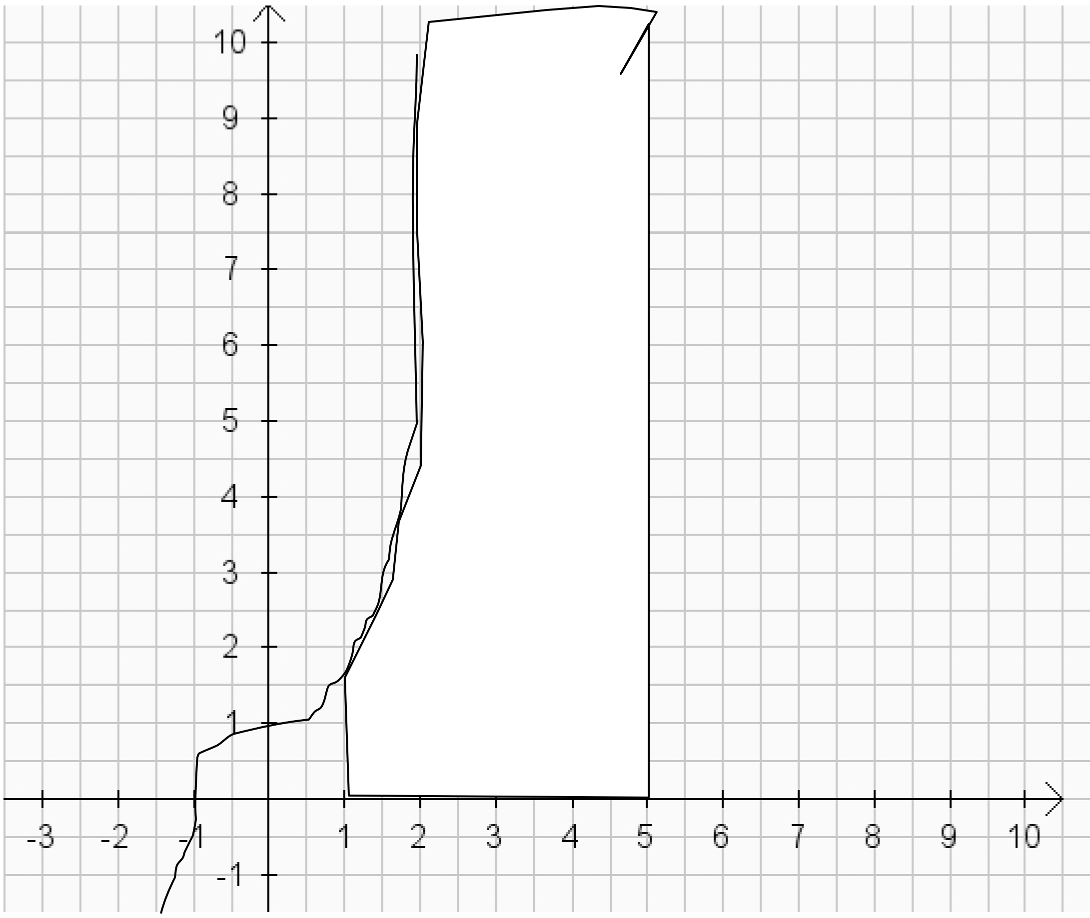
= (1/15*5³ +2*5) – (1/15*1³ +2*1) = 16/4/15cm²



c)

$_1\int^5$ f(x) = x^3 +1 dx = $[1/4x^4 +1x]^5_1$ = $(1/4*5^4 +1*5) – (1/4*1^4 +1*1)$

= 160cm²



d)

$_1\int^5$ f(x) = $-3/4x^2 + 27$ dx = $[-1/4x^3 + 27x]^5_1$

= $(-1/4*5^3 + 27*5) – (-1/4*1^3 + 27*1) = 77cm^2$