5. Find the point on $y = f(x)$ which is moved to $(5, -2)$ under the transformation $g(x) = 2 - 5f(x+4)$

$$\boxed{\left(9, \frac{4}{5}\right)}$$

$x-4$	x	y	$-5y+2$
5	9	$\frac{4}{5}$	-2

$S = x - 4$
$x = 9$

$-2 = -5y + 2$
$-4 = -5y$
$y = \frac{4}{5}$

6. Given $f(x) = -2x^2 + 8x$

Draw the graph of f(x) and on the same set of axes the graph of $-f(|x|)$.
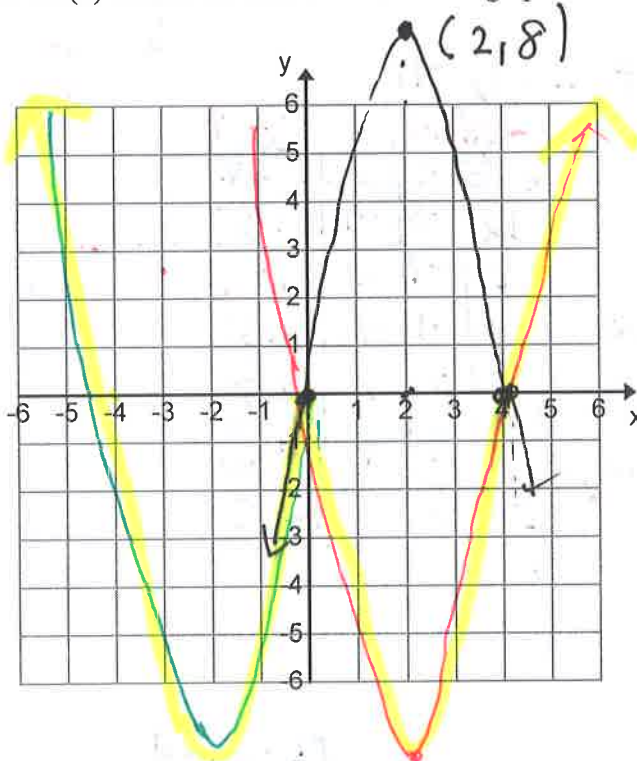
$f(x) = -2x^2 + 8x$

$= -2x(x-4)$

x-int : $\boxed{0, 4}$

$f(2) = -2(2)^2 + 8(2)$

$= -8 + 16$

$= 8$

vertex : $(2, 8)$

$(2, 8)$

$(2, -8)$