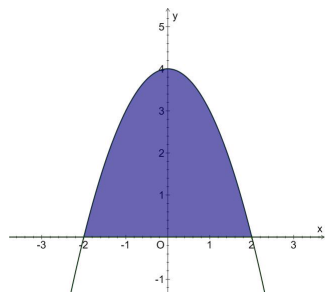


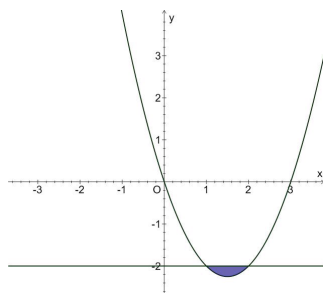
Exercices T3EE - CALCUL D'AIRES

Déterminer l'aire de la surface hachurée délimitée par les courbes représentatives des fonctions f et g .
Les points d'intersection sont à déterminer par un calcul.



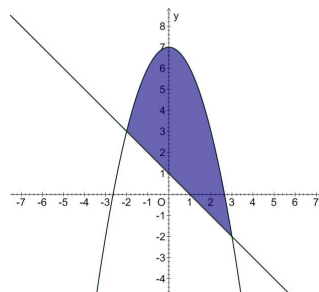
$$f(x) = 0$$

$$g(x) = -x^2 + 4$$



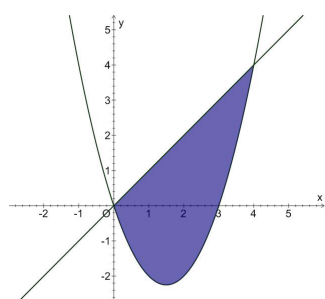
$$f(x) = -2$$

$$g(x) = x^2 - 3x$$



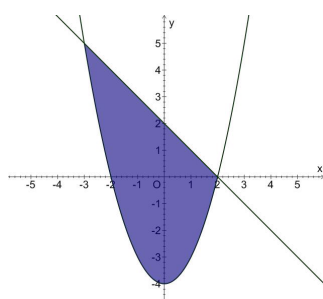
$$f(x) = 7 - x^2$$

$$g(x) = -x + 1$$



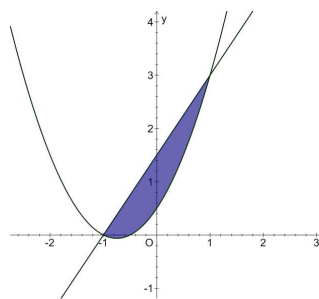
$$f(x) = x$$

$$g(x) = x^2 - 3x$$



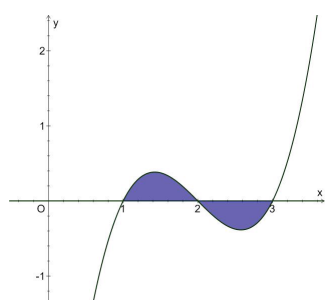
$$f(x) = -x + 2$$

$$g(x) = x^2 - 4$$



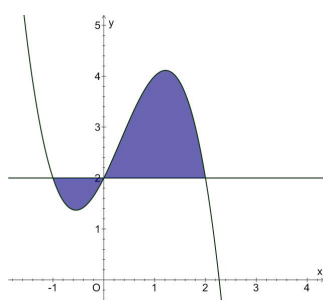
$$f(x) = \frac{3}{2}(x + 1)$$

$$g(x) = x^2 + \frac{3}{2}x + \frac{1}{2}$$



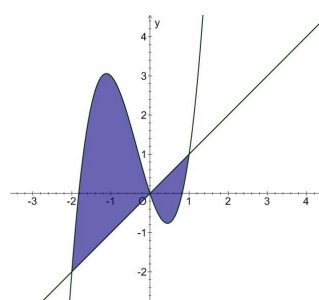
$$f(x) = 0$$

$$g(x) = x^3 - 6x^2 + 11x - 6$$



$$f(x) = 2$$

$$g(x) = -x^3 + x^2 + 2x + 2$$



$$f(x) = x$$

$$g(x) = 2x^3 + 2x^2 - 3x$$

Résultats:

points d'intersection:	$(-2; 0) \quad (2; 0)$	$(1; -2) \quad (2; -2)$	$(-2; 3) \quad (3; -2)$
	$(0; 0) \quad (4; 4)$	$(-3; 5) \quad (2; 0)$	$(-1; 0) \quad (1; 3)$
	$(1; 0) \quad (2; 0) \quad (3; 0)$	$(-1; 2) \quad (0; 2) \quad (2; 2)$	$(-2; -2) \quad (0; 0) \quad (1; 1)$
aires :	$A = \frac{32}{3}$	$A = \frac{1}{6}$	$A = \frac{125}{6}$
	$A = \frac{32}{3}$	$A = \frac{125}{6}$	$A = \frac{4}{3}$
	$A = \frac{1}{2}$	$A = \frac{37}{12}$	$A = \frac{37}{6}$