WS 1 – AREA BETWEEN CURVES

Find the area enclosed by the given curves without a calculator. Include a labeled diagram with each.

1. $g(x)=x-1$, $h(x)=1-x^2$
2. $y=\sqrt{x}$, $y=x$
3. $y=x^2-8x$, $y=0$

Find the area of the enclosed area(s) correct to 3 decimal places.

1. $f(x)=-x^2-x+3$ $g(x)=e^x$	
2. $f(x)=\sin\frac{x}{3}$ $g(x)=2x^3-3x^2-2x+1$	
3. $y=4\sin(2x-1)$ $y=x^3-3x^2+2x-1$	
4. $y=x^3-3x^2-2x+1$ $y=x-2$	
5. $f(x)=x^3-8x+4$ $g(x)=-x^3+4x-1$	

6. $f(x)=2^{x-1}$
$g(x)=2\sqrt{x}$

7. $f(x)=x^4-3x^2$
$g(x)=\frac{1}{2}x-1$

8. $x=3$
$f(x)=x+1$
$g(x)=-x^2-3x+4$

9. $f(x)=4\sin x$
$g(x)=x^2-2x+1$

10. $f(x)=5\cos x$
$g(x)=-x^3-3x^2+3x+5$