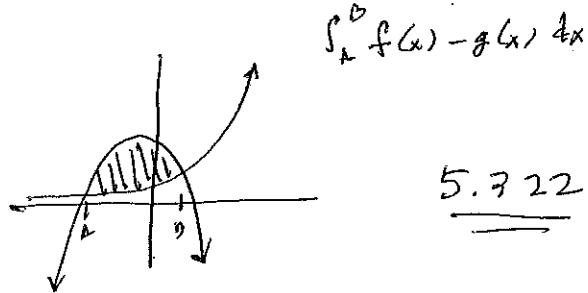


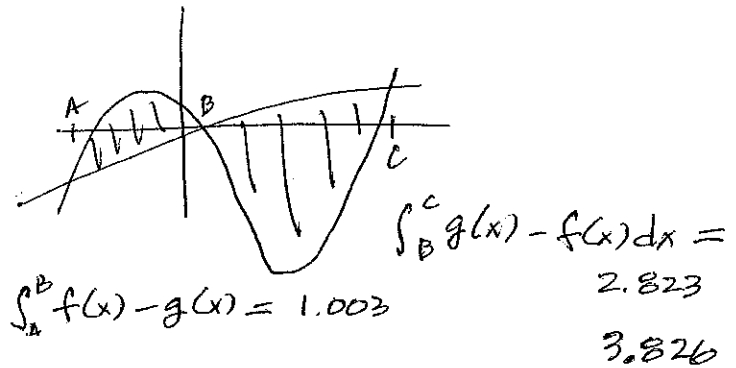
Ws 2 - Area between curves with calculator.

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

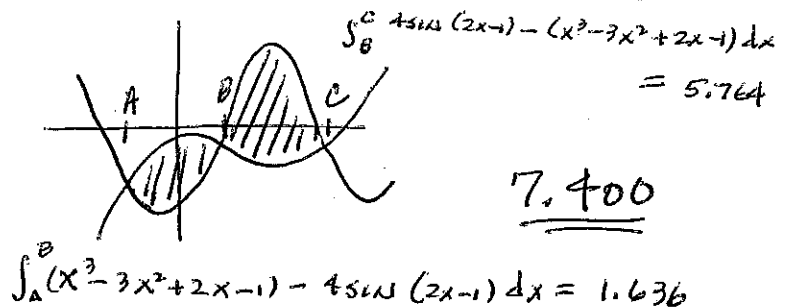
1. $f(x) = -x^2 - x + 3$
 $g(x) = e^x$



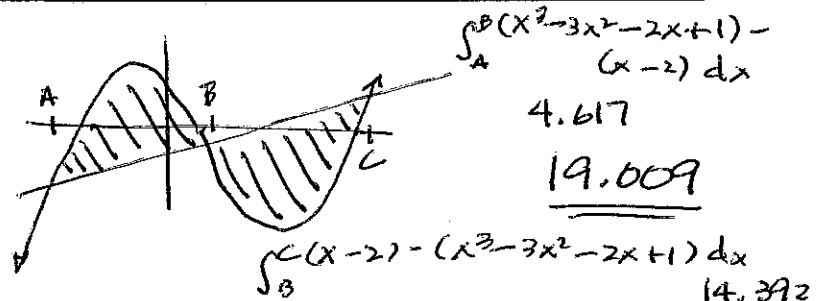
2. $f(x) = \sin \frac{x}{3}$
 $g(x) = 2x^3 - 3x^2 - 2x + 1$



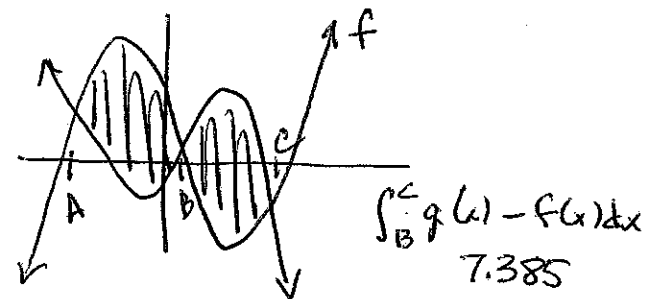
3. $y = 4 \sin(2x-1)$
 $y = x^3 - 3x^2 + 2x - 1$



4. $y = x^3 - 3x^2 - 2x + 1$
 $y = x - 2$



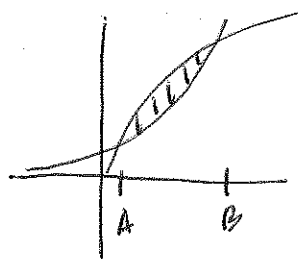
5. $f(x) = x^3 - 8x + 4$
 $g(x) = -x^3 + 4x - 1$



$\int_A^B f(x) - g(x) dx = 31.788$

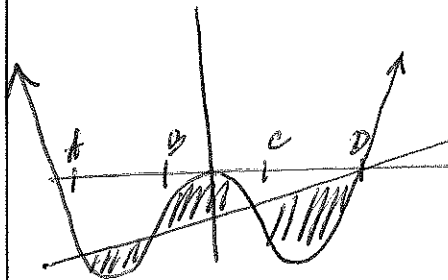
39.173

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



$$\int_A^B f(x) - g(x) = \underline{\underline{1.961}}$$

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



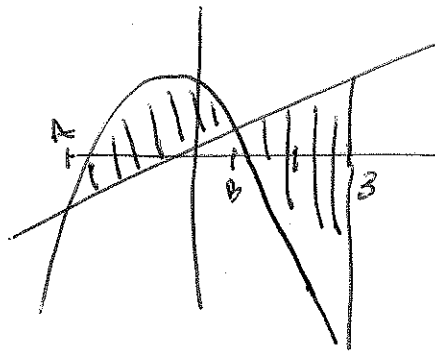
$$\int_A^B g(x) - f(x) = .3104$$

$$\int_B^C f(x) - g(x) = .8356$$

$$\int_C^D g(x) - f(x) = \underline{\underline{1.4167}}$$

$$\underline{\underline{2.563}}$$

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

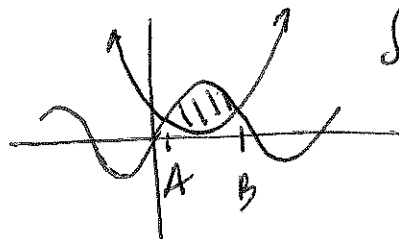


$$\int_A^B g(x) - f(x) dx = 24.694$$

$$\int_B^C f(x) - g(x) dx = 19.013$$

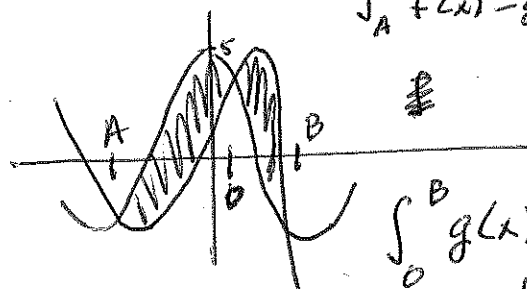
$$\underline{\underline{43.707}}$$

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



$$\int_A^B f(x) - g(x) dx = \underline{\underline{5.833}}$$

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



$$\int_A^5 f(x) - g(x) dx = 6.027$$

$$\int_0^B g(x) - f(x) dx = 1.314$$

$$\underline{\underline{7.341}}$$