

Course

MATH 2A

Student ID

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Test

QUIZ 1

Question

2

3

4

5

Points

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MAX: 8

MAX: 7½

MAX: 11½

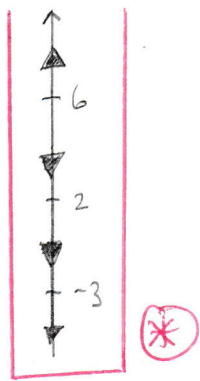
MAX: 8

Total

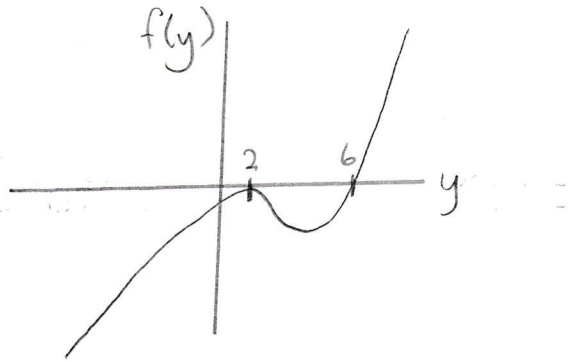
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MAX: 35

[2] [a]



[b]



[c] [i] -3 ① [ii] 2

[d] SEMI-STABLE *

$$[3] \frac{dA}{dt} = \underline{3(5) + 4(7)} - 20 \left(\frac{A}{400 - 20t} \right) *$$

$$\frac{dA}{dt} = \underline{43 - \frac{A}{20-t}} *$$

$$[4] [a] y' = \frac{1}{2(1 + (\frac{x}{2})^2)} = \frac{1}{2 + \frac{x^2}{2}} *$$

$$y'' = -\frac{1}{(2 + \frac{x^2}{2})^2} *$$

$$y'' + 2x(y')^2 = -\frac{1}{(2 + \frac{x^2}{2})^2} + \frac{2x}{(2 + \frac{x^2}{2})^2} \neq 0 *$$

[b] NO

$$[5] [a] y' = \underline{3(\frac{2x}{3} + C)^2} \rightarrow (y')^3 = 27(\frac{2x}{3} + C)^6$$

$$8y^2 = 8(\frac{2x}{3} + C)^6 \rightarrow \text{NOT EQUAL}$$

NOT A SOLUTION

[b] NOT A SOLUTION

$$[c] y' = 0 \rightarrow \underline{(y')^3 = 0 = 8y^2} \text{ ②}$$

[d] NO SOLUTION IN [b], E+U APPLIES