(C1-8.5a) Name:

Homework Questions 5 – Integrating a derived function

Find the equation of the curve when you are given the derived function and a given point

1. $\int 4 - 3x \ dx$ at (-2,4)

$y = 4x - \frac{3x^2}{2} + 18$

2. $\int 6x^2 - 5x - 25 \ dx$ at (-2,0)

$y = 2x^3 - \frac{5x^2}{2} - 25x + 24$

3. $\int 12x^2 + x + 1 \ dx$ at (2, 24)

$y = 4x^3 + \frac{x^2}{2} + x - 12$

4. $\int 2x + 1 \ dx$ at (1,1)

$y = x^2 + x - 1$

5. $\int x^2 + 2x - 15 \ dx$ at (3,-5)

$y = \frac{x^3}{3} + x^2 - 15x + 22$

6. $\int -6x^2 + 4x + 2 \ dx$ at (0,0)

$y = -2x^3 + 2x^2 + 2x$

7. $\int 3x^2 - 12x + 12 \ dx$ at (0,3)

$y = x^3 - 6x^2 + 12x + 3$

8. $\int 2x \ dx$ at (2,1)

$y = x^2 - 3$

9. $\int 3 - 4x \ dx$ at (-2,1)

$y = 3x - 2x^2 + 15$

10. $\int 6x^2 - 4x - 1 \ dx$ at (-1,-1)

$y = 2x^3 - 2x^2 - x + 2$