## MATH 122: FINAL EXAM BINGO SOLUTIONS

1. 
$$\frac{1}{3}$$

3. 
$$(x+2)e^{\frac{1}{2}x^2+2x+1}$$

5. 
$$f'(x) = 0$$

7. 
$$x = 3$$
  $x = 1$ 

8. 
$$P(t) = 9(3)^t$$

$$9. -8$$

10. 
$$P(t) = 81(\frac{1}{3})^t$$

11. 
$$-\frac{1}{2}$$

13. 
$$a - 1$$

14. 
$$\ln(x) + 1$$

15. 
$$\frac{1-x}{e^x}$$

17. 
$$32, -162$$

18. 
$$negative(2)$$

19. 
$$6e^{5x} + e^{-x^2} + C$$

20. 
$$\ln(2x^2+7)+C$$

21. 
$$7x + C$$

$$22. \ 12x^3 + 13x^2 + C$$

23. 
$$e^{\frac{1}{2}x^2+2x+1}+C$$

24. 
$$F(b) - F(a)$$