

Calculus Calculator Work Sheet

- All Answers to nearest thousandths
- Use graphing calculator on each problem

Row # _____
 Name _____
 Period _____

1. $y = x^3 - 2x$ By looking at the Table tell how many real roots the function has from -10 to +10. _____

2. $f(x) = -6x^4 - 5x^3 + 4x^2 - 2x + 5$ Find $f(2.465)$ by using y-variable _____

3. $\sin(15\pi/17)$ _____

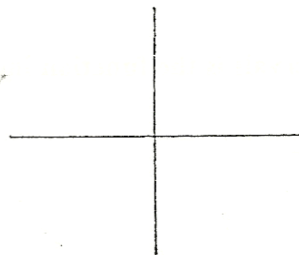
4. $\cos(246^\circ)$ _____

5. $\sec(7\pi/8)$ _____

6. $\csc(42^\circ)$ _____

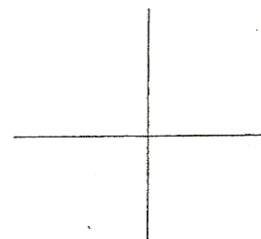
7. How do you type in Absolute Value of $(2x-3)$ on the graphing calc? _____

8. Graph on Calculator $2y - 3x = 6$



9. Evaluate: $2x^{4/3}$ when $x = -3$ _____

10. Graph circle on the graphing calc $x^2 + y^2 = 38$



11. In # 10 the circle looks like an ellipse. How do you square up The circle? _____

12. Using Trace and Zoom Box (twice) tell the vertex of the parabola
 $y = -3.7x^2 + 4.2x - 2$ _____

13. Find x-intercept by using 2nd Calculate and finding the Zeros
 $x^2 + 8x - 7y = 0$ _____

14. $s = 5 + 40t - 16t^2$ Using your calculator find the maximum height the ball is above the ground _____

15. In # 14, to the nearest tenth of a second, how long will the ball be more than 12 feet above the ground? _____

16. Find the derivative numerically $f(x) = 3\sqrt{x} - \frac{5}{2}x^{4/5}$ _____
 $f'(2) = \underline{\hspace{2cm}}$

17. Find integral numerically $\int_{1.5}^{4.3} 4x^3 - 5x + 7 \, dx$ _____

18. $N = \frac{220}{1 + 10(0.83)^t}$ _____

How many years will it take the sheep population in Colorado to reach 80?

19. Find the vertical asymptotes by using the Standard Window to graph _____

$$y = \frac{2x^2 - 8}{x^2 - 16}$$

20. On what intervals is the function increasing and decreasing? _____

$$y = \frac{x^3 + 1}{x - 2}$$