

Answers to AP Calculus - Assignment #Review 2Aa

1) $f'(1) = -6$

2) $f'(-3) = -4$

3) $-\frac{1}{4}$

4) 4

5) $(-2, 0)$

6) $\left(-5, \frac{5}{2}\right), \left(5, -\frac{5}{2}\right)$

7) $y = -4x + 9$

8) $y = \frac{2}{3}x - 2$

9) $\frac{dy}{dx} = \frac{2}{\sqrt{4x+5}}$

10) $\frac{dy}{dx} = 2x$

11) $\frac{dy}{dx} = \frac{2}{x^2 + 6x + 9}$

12) $\frac{dy}{dx} = \frac{1}{\sqrt{2x+5}}$

13) Average: $\frac{5}{2}$ Instant.: 2

14) Average: $-\frac{1}{33}$ Instant.: $-\frac{1}{36}$

15) Average: $-\frac{2}{3}$ Instant.: -1

16) Average: $-\frac{1}{33}$ Instant.: $-\frac{1}{36}$

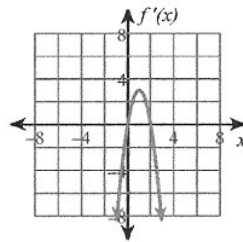
17) $\frac{dy}{dx} = -54x^5 - 48x^3 - 30x$

18) $\frac{dy}{dx} = -84x^6 + 45x^4 - 24x$

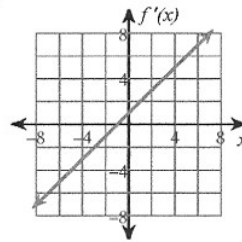
19) $\frac{dy}{dx} = \frac{20x^4 - 36x^2}{(5x^2 - 3)^2}$

20) $\frac{dy}{dx} = -\frac{9x^2}{(x^3 + 2)^2}$

21)



22)



23)

