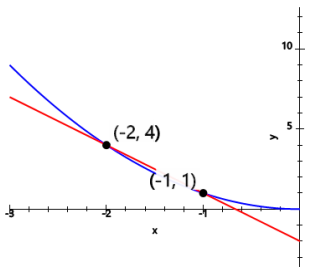
Name

Average Rate of Change - Graph and Secant to Slope Expression

1 Write the expression for the average rate of change shown by the secant line between the two marked points (-2, 4) and (-1, 1).

y = x?



A $\frac{4-1}{(-1)-(-2)}$

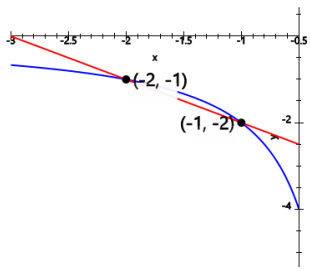
B $\frac{1-4}{(-2)-(-1)}$

C $\frac{(-1)-(-2)}{1-4}$

D $\frac{1-4}{(-1)-(-2)}$

2 Write the expression for the average rate of change shown by the secant line between the two marked points (-2, -1) and (-1, -2).

y = 2/x



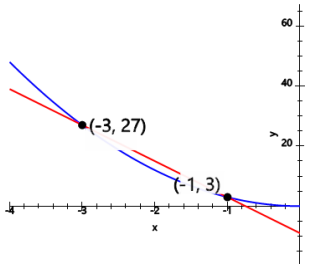
A $\frac{(-2)-(-1)}{(-1)-(-2)}$

B $\frac{(-2)-(-1)}{(-2)-(-1)}$

C $\frac{(-1)-(-2)}{(-1)-(-2)}$

3 Write the expression for the average rate of change shown by the secant line between the two marked points (-1, 3) and (-3, 27).

y = 3x?



A $\frac{3-27}{(-3)-(-1)}$

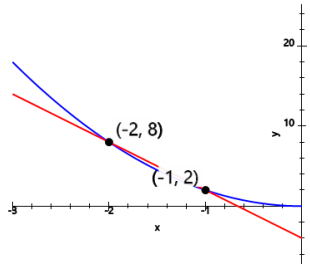
B $\frac{27-3}{(-1)-(-3)}$

C $\frac{(-3)-(-1)}{27-3}$

D $\frac{27-3}{(-3)-(-1)}$

4 Write the expression for the average rate of change shown by the secant line between the two marked points (-1, 2) and (-2, 8).

y = 2x?



A $\frac{(-2)-(-1)}{8-2}$

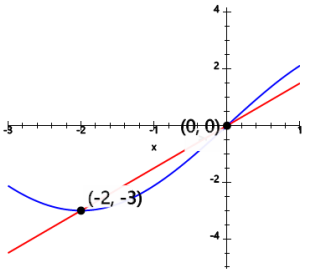
B $\frac{2-8}{(-2)-(-1)}$

C $\frac{8-2}{(-2)-(-1)}$

D $\frac{8-2}{(-1)-(-2)}$

5 Write the expression for the average rate of change shown by the secant line between the two marked points (0, 0) and (-2, -3).

y = 3sin(?x/4)



A $\frac{0-(-3)}{(-2)-0}$

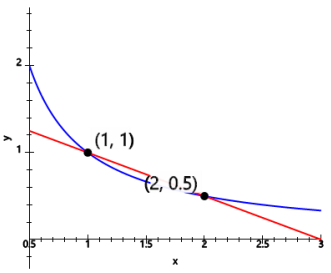
B $\frac{(-2)-0}{(-3)-0}$

C $\frac{(-3)-0}{0-(-2)}$

D $\frac{(-3)-0}{(-2)-0}$

6 Write the expression for the average rate of change shown by the secant line between the two marked points (2, 0.5) and (1, 1).

y = 1/x



A $\frac{1-2}{1-0.5}$

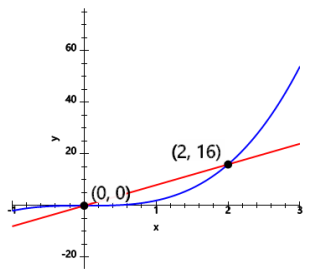
B $\frac{1-0.5}{2-1}$

C $\frac{0.5-1}{1-2}$

D $\frac{1-0.5}{1-2}$

7 Write the expression for the average rate of change shown by the secant line between the two marked points (2, 16) and (0, 0).

y = 2x?



A $\frac{0-16}{0-2}$

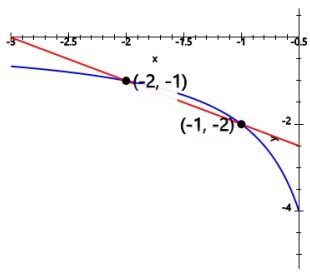
B $\frac{0-2}{0-16}$

C $\frac{0-16}{2-0}$

D $\frac{16-0}{0-2}$

8 Write the expression for the average rate of change shown by the secant line between the two marked points (-1, -2) and (-2, -1).

y = 2/x



A $\frac{(-2)-(-1)}{(-2)-(-1)}$

B $\frac{(-1)-(-2)}{(-1)-(-2)}$

C $\frac{(-1)-(-2)}{(-2)-(-1)}$