Exam

Gnew

1. Determine x.

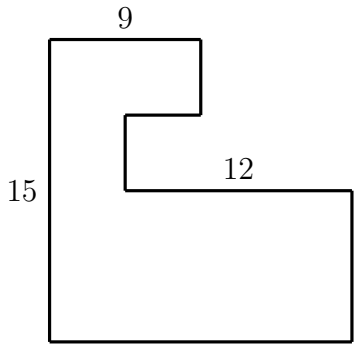
$$9^{2x-1} - 9^{2x-2} = 1944$$

2. Determine values of a, b, and c that satisfy both equations.

$$ab + c = 2050$$

$$a + bc = 2051$$

3. Calculate the perimter of the figure below.



4. Determine $\frac{dy}{dx}$, then find an equation for the tangent line at $x = 3$.

$$12y - x^2y^3 - 16x = 0$$

5. Bob received a score of 138 on an IQ test. His wife scored 134. If they had a child, which of the following most accurately predicts his score?

   A. 120

   B. 136

   C. 142

   D. 100

6. A and B are found to correlate with r = 0.23. This implies a _____ relationship between A and B.

   A. weak negative

   B. strong negative

   C. weak positive

   D. strong positive

7. Determine $\lim_{x \to 0} \dfrac{7x - \sin(x)}{x^2 + \sin(3x)}$.

8. Determine $\lim_{x \to 0} \dfrac{-2x^4 + 6x^2 - 4x}{x^2 - 2x}$.

DM your answers to Gnew#7805. The first person to get a 75 or above will recieve sloppy toppy.