

For the given function: $f(x) = -2\cos(x - \frac{\pi}{4})$, determine how many of the following are true.

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- b) Symmetric to x-axis
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- d) Periodic
- e) Monotonic
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- g) Continuous
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A = Area of a triangle with sides 9, 40, 41

B = Angle B (measure in degrees) of ΔABC with $\angle A = 60^\circ$,
side a = $6\sqrt{2}$ cm, and side b = $4\sqrt{3}$ cm.

$$C = \cos(\sin^{-1}(\sin(\sin^{-1}(\frac{-\sqrt{3}}{2}))))$$

D = Diagonal length of a rectangle with length of 10 m and perimeter of 68 m.

Find: $\frac{A}{B} + \frac{D}{C}$

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$$X = \begin{pmatrix} -3 & 2 & -1 \\ 4 & -5 & -2 \\ 1 & -1 & 3 \end{pmatrix}$$

$$A = |X|$$

$$B = a_{32} \text{ of } X^T$$

$$C = |M_{13}|, \text{ M being defined as a minor of matrix X}$$

$$D = M_{21}^{-1}, \text{ M being defined as a minor of matrix X}$$

$$\text{Find: } \frac{A}{B+C} \cdot D$$

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A = Linear speed of a wheel in in/s

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$$\log_8 (A(2A)(A^2)) = 3$$

Non-zero solutions on $[0, \pi]$ of: $\sin^2 B \cos^2 B + \cos^4 B - \sin^2 B - \cos^2 B = 0$

$$\frac{(x-2)^2}{9} + \frac{(y-C)^2}{16} = 1 \text{ with } (0,0) \text{ a point on graph}$$

$$\text{Find: } A \cos\left(\frac{|B|}{4}\right) + 3C$$

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$$f(x) = \frac{-2}{5} \sin\left(\frac{4}{5} - \frac{3x}{2}\right) + \frac{3}{7}$$

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$$\frac{\pi}{2} \leq x \leq \pi, \frac{\pi}{2} \leq y \leq \pi$$

$$A = \cos(x+y)$$

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Find: The letter that corresponds to the largest value.

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$$B = \cos(\sin^{-1}(-\cos(\frac{-\pi}{6})))$$

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Find: $(A+D)BC_x$

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Sponsor's Copy Pre-Cal Team Questions January State-Wide Competition

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