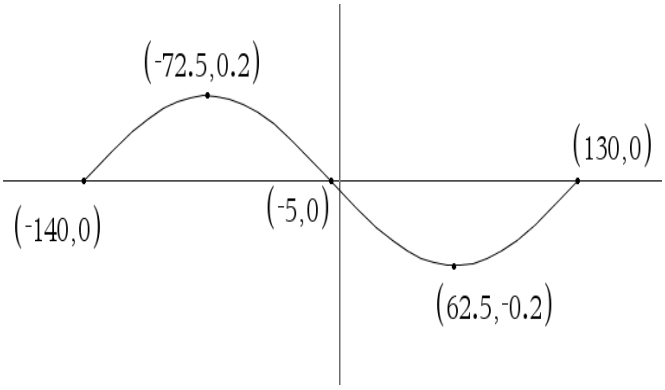
Name_____

2nd hour	3rd hour	4th hour
5th hour	6th hour	7th hour

SA Transformations of Sine and Cosine
Writing a Function from its Graph
Graphing a Function from its Function

Write the equation of the given trigonometric function, answer the related questions, and select the related transformations



1. Write the trigonometric function in the given graph in both formats

   General Trigonometric Function

   _____

   Translated Trigonometric Function

   _____

2. Complete the related table

A	B	C	D	Amplitude	Phase shift	Period Length	State implied period

3. Circle the related transformations

Vertical Compression	Vertical Stretch	Vertical Reflection	Horizontal Compression	Horizontal Stretch	Phase Shift LEFT	Phase Shift RIGHT

Show any related work here

Extra Credit #1:
Which is more special to you and why?
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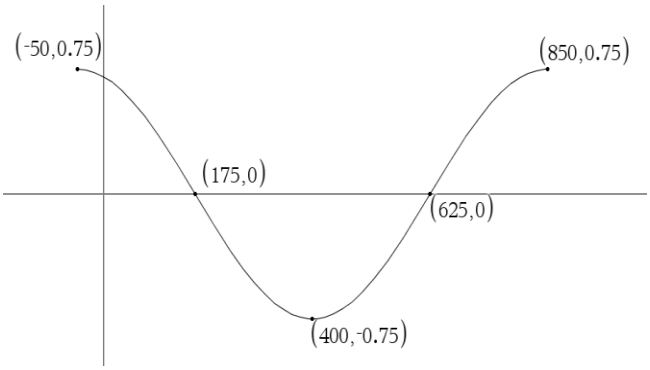

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Extra Credit #2: Give an example of when you learned a lesson about the nature of friendships you have had in the past. Was this lesson a positive or negative experience?

$$f(x) = \frac{-5}{7}\cos\left(\frac{8}{5}x - 80\right)$$

state the translated version of this trigonometric function_____

A	B	C	D

State any extreme value points or intercepts in the IMPLIED period as POINTS when angles are measured in degrees

Label as Point K on graph below	Label as Point N on graph below	Label as point I on graph below	Label as point G on graph below	Label as point H on graph below
(,)	(,)	(,)	(,)	(,)

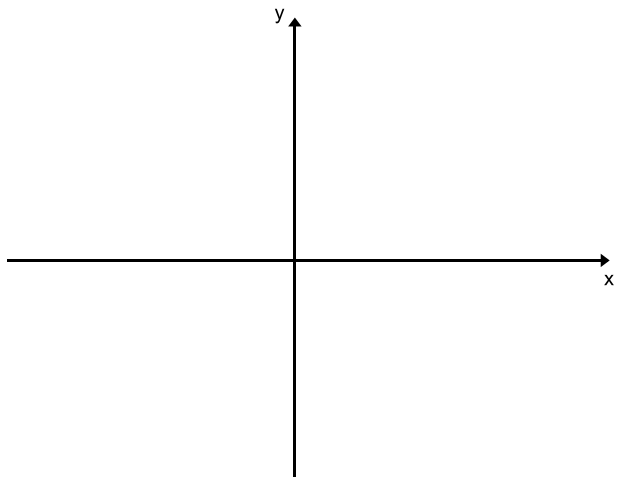
State each of these (these depend on A and D)

Range of the function	Midline of the function	Amplitude of the function

State each of these (these depend on B and C)

Length of ONE PERIOD of the function	Period that is IMPLIED by this function	PHASE Shift of this function (be certain to state direction and number)

Sketch g(x) label the FIVE important points (use the letters from above)



Circle the related transformations

Vertical Compression	Vertical Stretch	Vertical Reflection	Horizontal Compression	Horizontal Stretch	Phase Shift LEFT	Phase Shift RIGHT

$$g(x) = \frac{-5}{6}\sin\left(\frac{4}{3}x - 96\right)$$

state the translated version of this trigonometric function_____

A	B	C	D

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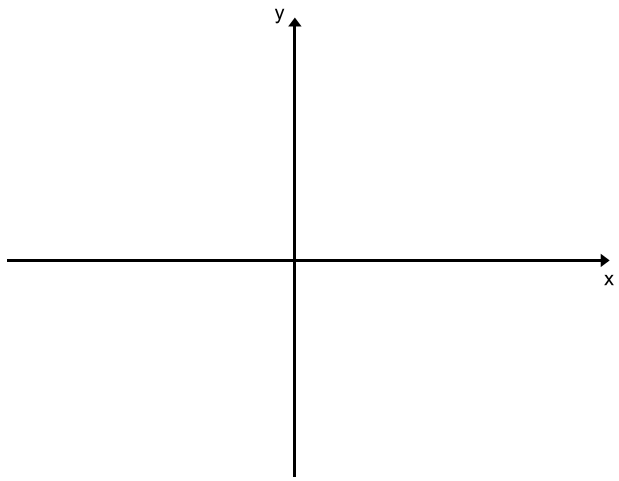

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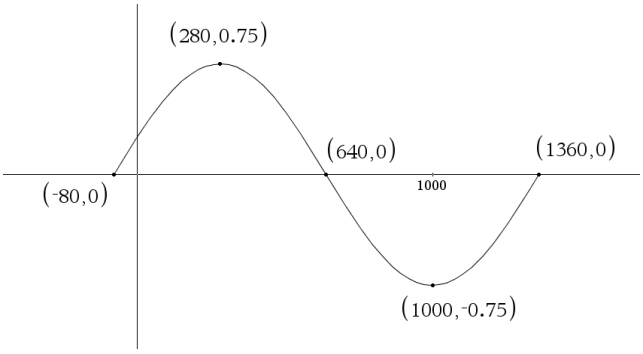

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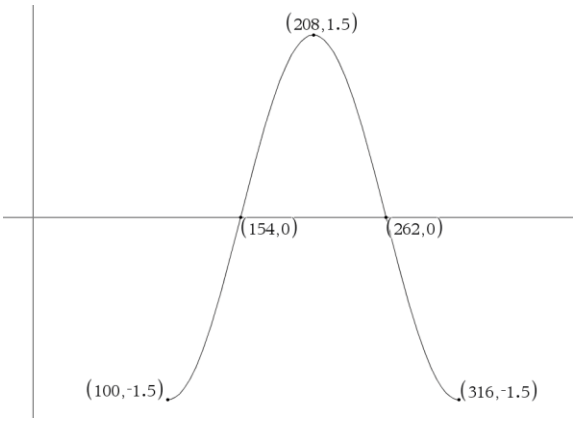

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Extra Credit #2: Give an example of when you learned a lesson about the nature of friendships you have had in the past. Was this lesson a positive or negative experience?

$$f(x) = -\frac{5}{3}\sin\left(\frac{8}{3}x - 72\right)$$

state the translated version of this trigonometric function_____

A	B	C	D

State any extreme value points or intercepts in the IMPLIED period as POINTS when angles are measured in degrees

Label as Point K on graph below	Label as Point N on graph below	Label as point I on graph below	Label as point G on graph below	Label as point H on graph below
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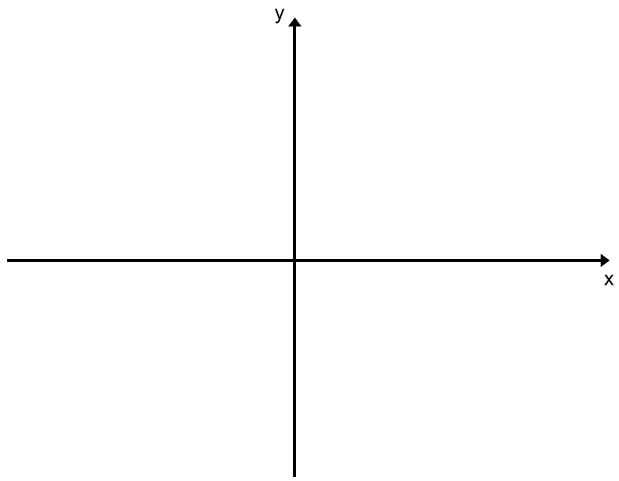

Circle the related transformations

Vertical Compression	Vertical Stretch	Vertical Reflection	Horizontal Compression	Horizontal Stretch	Phase Shift LEFT	Phase Shift RIGHT

$$g(x) = \frac{2}{5}\cos\left(\frac{5}{3}x + 90\right)$$

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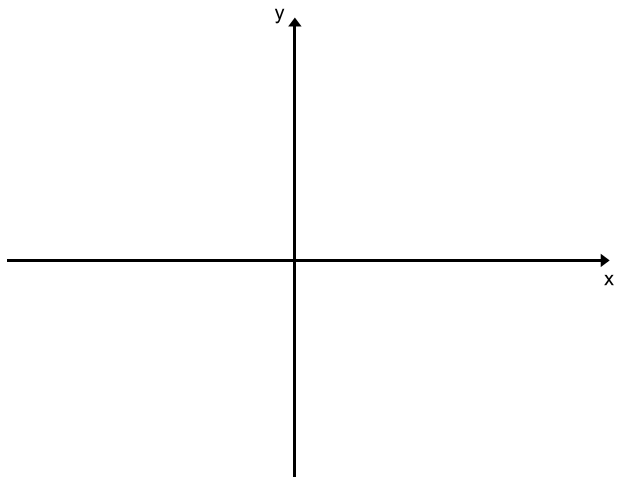

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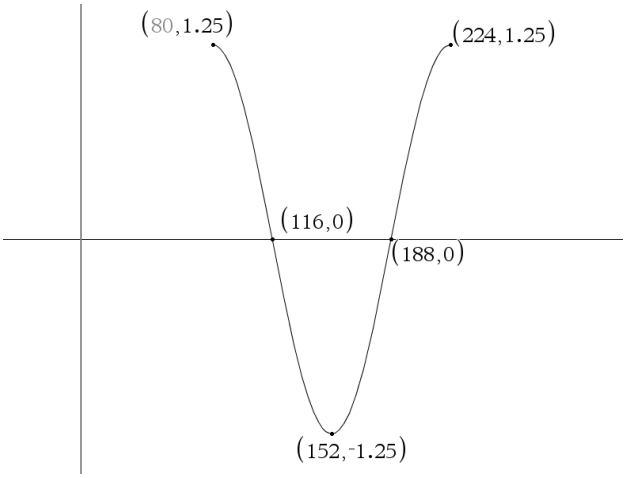

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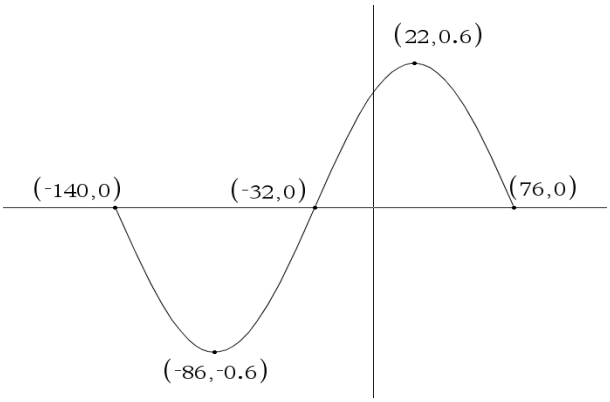

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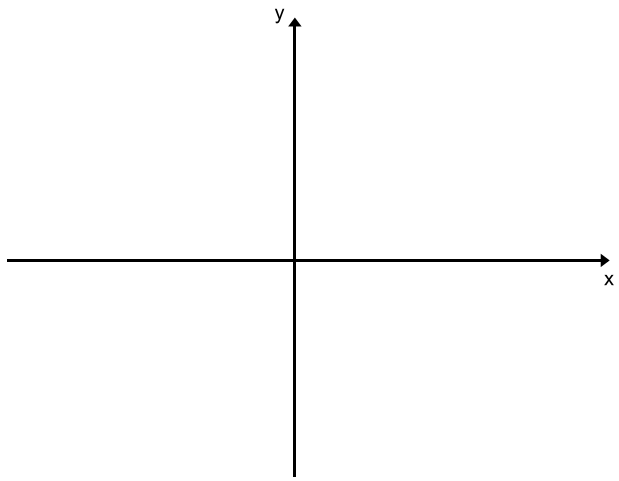

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