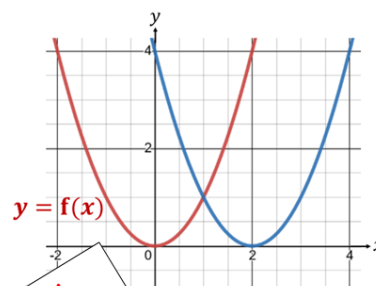


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Question 1 – Answer

[End the activity](#)

The diagram shows the function $f(x)$.
The other function pictured is a transformation of $f(x)$; write this function using function notation.



Ade's answer: $y = f(x + 2)$



Belle's answer: $y = f(x - 2)$

Correct!



Chloe's answer: $y = f(x) + 2$



Dean's answer: $y = f(x) - 2$

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Question 2 – Answer

[End the activity](#)

A function A, $y = g(x)$, is drawn on a set of axes.
The function B, $y = g(x) - 3$, is drawn on the same axes.
Describe the transformation from function A to function B



Ade's answer: Translation $\begin{pmatrix} -3 \\ 0 \end{pmatrix}$



Belle's answer: Translation $\begin{pmatrix} 3 \\ 0 \end{pmatrix}$



Chloe's answer: Translation $\begin{pmatrix} 0 \\ -3 \end{pmatrix}$

Correct!



Dean's answer: Translation $\begin{pmatrix} 0 \\ 3 \end{pmatrix}$

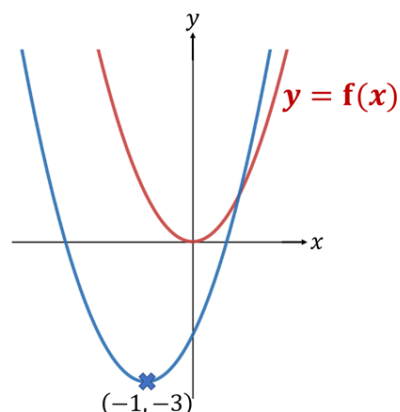
[Return to "Choose a question" screen](#)

Question 3 – Answer

[End the activity](#)

The diagram shows the function $f(x)$ whose minimum point is the origin.

The other function pictured is a transformation of $f(x)$ whose minimum point is $(-1, -3)$; write this function using function notation.



Ade's answer:

$$y = f(x + 3) - 1$$



Belle's answer:

$$y = f(x - 1) - 3$$



Chloe's answer:

$$y = f(x + 1) + 3$$



Dean's answer:

$$y = f(x + 1) - 3$$

Correct!

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Question 4 – Answer

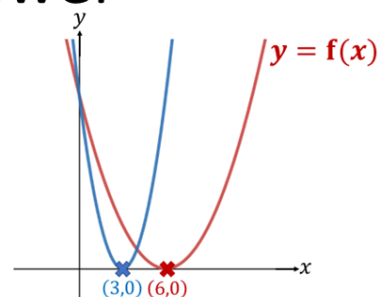
[End the activity](#)

The function $y = f(x)$ is shown; it has a minimum point of $(6,0)$.

The other function shown is a transformation of $y = f(x)$, whose minimum point is $(3,0)$.

Both functions intersect the y-axis at $(0,5)$.

Write, using function notation, the second function.



Ade's answer: $y = 2f(x)$



Belle's answer: $y = f(x + 3)$



Chloe's answer: $y = f(2x)$

Correct!



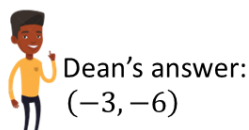
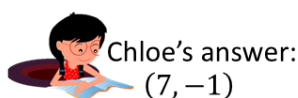
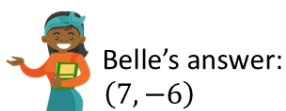
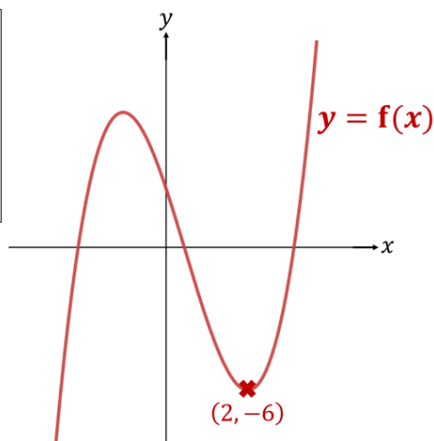
Dean's answer: $y = f\left(\frac{1}{2}x\right)$

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Question 5 – Answer

[End the activity](#)

The function $y = f(x)$ is shown.
The minimum point of $y = f(x)$ is $(2, -6)$.
Write the coordinates of the minimum point of $y = f(x) + 5$.

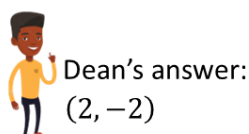
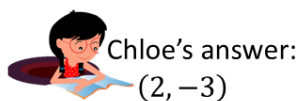
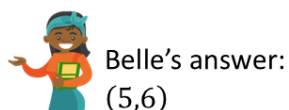
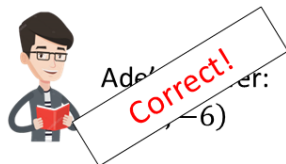
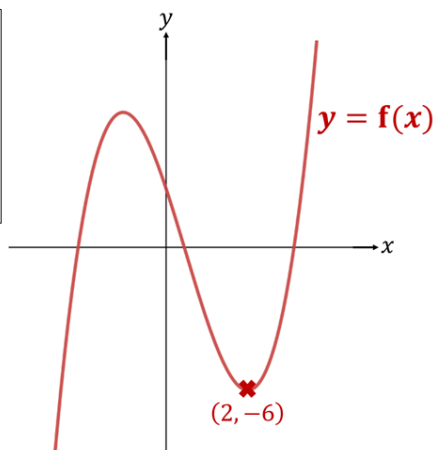


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Question 6 – Answer

[End the activity](#)

The function $y = f(x)$ is shown.
The minimum point of $y = f(x)$ is $(2, -6)$.
Write the coordinates of the minimum point of $y = f(x + 3)$.

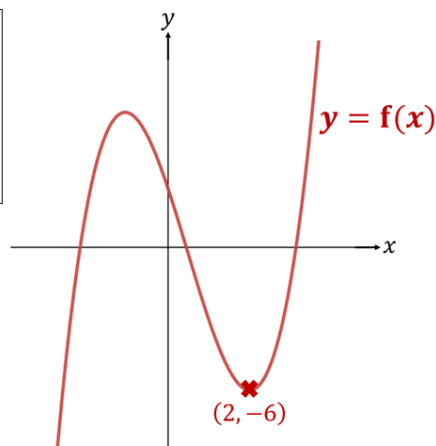


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Question 7 – Answer

[End the activity](#)

The function $y = f(x)$ is shown.
The minimum point of $y = f(x)$ is $(2, -6)$.
Write the coordinates of the minimum point of $y = 2f(x)$.



Ade's answer:
 $(1, -6)$



Belle's answer:
 $(4, -6)$



Chloe's answer:
 $(2, -3)$



Dean's answer:
 $(2, -12)$

Correct!

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Question 8 – Answer

[End the activity](#)

The function $y = \cos(x)$ is shown as a dotted line on the graph for $0^\circ \leq x \leq 360^\circ$.

What is the equation of the other function pictured?



Ade's answer:
 $y = \sin(x)$



Belle's answer:
 $y = \cos(-x)$

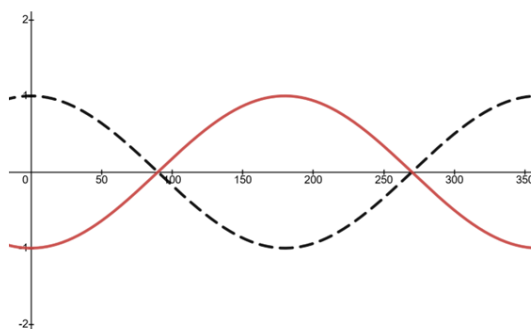


Chloe's answer:
 $y = \cos(x)$

Correct!



Dean's answer:
 $y = \cos(x)$



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Question 9 – Answer

End the activity

The function $y = \sin(x)$ is shown as a dotted line on the graph for $0^\circ \leq x \leq 360^\circ$.

What is the equation of the other function pictured?



Ade's answer:

$$y = 3 + \sin(x)$$



Belle's answer:

$$y = 3 \sin(x)$$



Chloe's

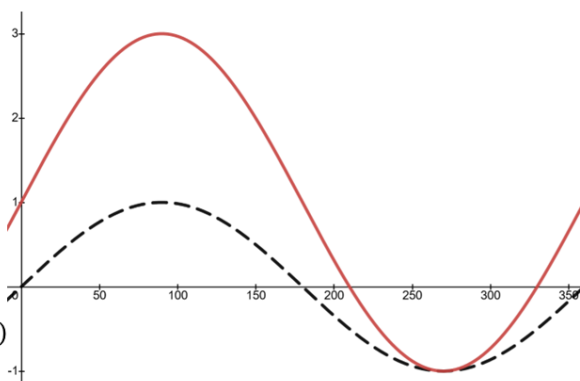
Correct!

$$y = 2 \sin(x)$$



Dean's answer:

$$y = 1 + \sin(2x)$$



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Question 10

End the activity

The function $y = \cos(x)$ is shown as a dotted line on the graph for $-180^\circ \leq x \leq 180^\circ$.

What is the equation of the other function pictured?



Ade's

Correct!

$$y = \cos(2x)$$



Belle's answer:

$$y = 2 \cos(3x)$$



Chloe's answer:

$$y = 3 \cos\left(\frac{1}{2}x\right)$$



Dean's answer:

$$y = \frac{1}{2} \cos(3x)$$

