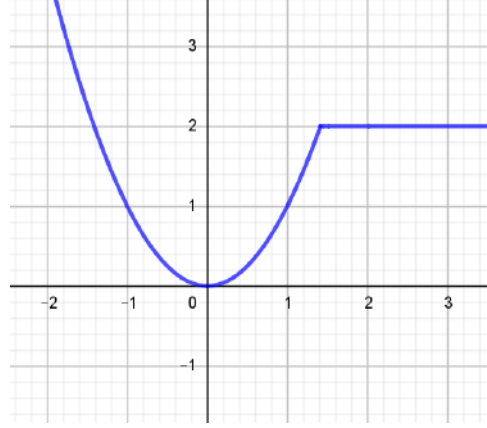


أسئلة استرشادية للصف الثانى الثانوى

رياضيات (١) للقسم الأدبى باللغة الإنجليزية

1-The opposite figure represents the graph of a function

The range of the function is .....



a)  $[0, \infty[$

b)  $[0, 2[$

c)  $] - \infty, \infty [$

d)  $] - \infty, 2 [$

2- Which of the following relations represents a function?

a)  $x + y^2 = 3$

b)  $x^2 + y = 8$

c)  $x^2 + y^2 = 25$

d)  $x = 5$

3- The opposite graph represents the function

$$f(x) = \frac{x^2 - 4}{x + 2}$$

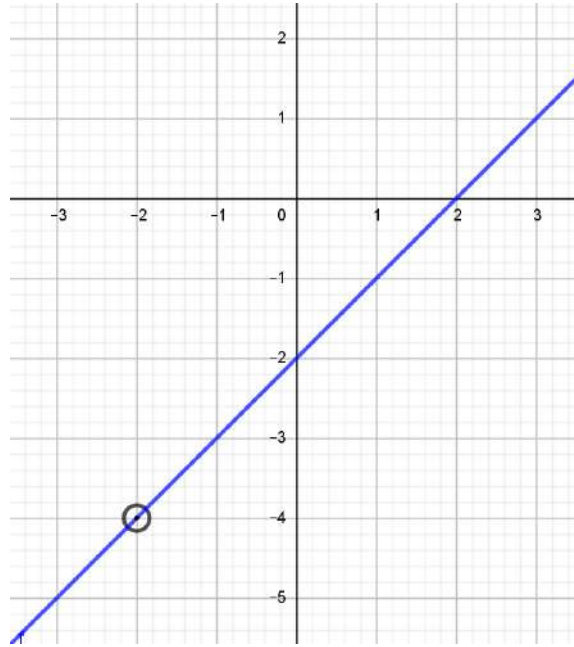
$$\lim_{x \rightarrow -2} f(x) \dots$$

a) Undefined

b) = 4

c) = - 4

d) = 2



4- In the triangle ABC the expression  $\frac{b^2 + c^2 - a^2}{bc} = \dots\dots\dots$

a)  $\cos a$

b)  $2\cos a$

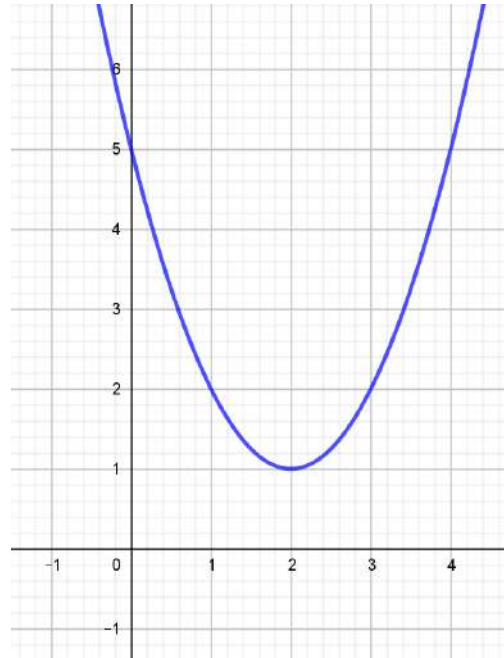
c)  $\sin a$

d)  $2\sin a$

5- Find the solution set of  $|x - 5| + 5 = x$ .

6- In the opposite figure

$$\lim_{x \rightarrow 2} f(x) \dots$$



a)  $= 2$

b)  $= 5$

c)  $= 1$

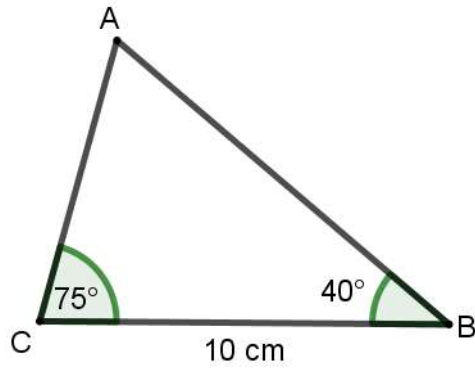
d) Not exist

7- If  $F: \mathbb{R}^+ \rightarrow \mathbb{R}$ ,  $f(x) = x - 5$  and  $n: [-1, 5] \rightarrow \mathbb{R}$ ,  $n(x) = x - 2$ ,

Then find the domain of the function  $(f + n)(x)$ .

8- In the opposite figure:

c = ..... cm



- a) 7
- b) 10
- c) 11
- d) 8

9- Find  $\lim_{x \rightarrow \infty} \frac{\sqrt{x^3 + 5x + 7}}{x^2 + 4}$

10- In the triangle ABC,

If  $a = 7\text{ cm}$ ,  $m(\hat{B}) = 30^\circ$ ,  $m(\hat{C}) = 105^\circ$

Then  $b = \dots\dots\dots \text{ cm}$

- a)  $\frac{7}{2}$
- b)  $\frac{7\sqrt{2}}{2}$
- c) 7
- d)  $7\sqrt{2}$

11- The solution set of the inequality:

$$|x| + 2 < \text{zero} \quad \text{in } \mathbb{R} \text{ is.....}$$

- a)  $\{-2\}$
- b)  $\{2\}$
- c)  $\emptyset$
- d)  $] -2, 2 [$

12-  $\lim_{x \rightarrow 3} \frac{3x^4 - 243}{x - 3} = \dots$

- a) 81
- b) 324
- c) 4
- d) 576