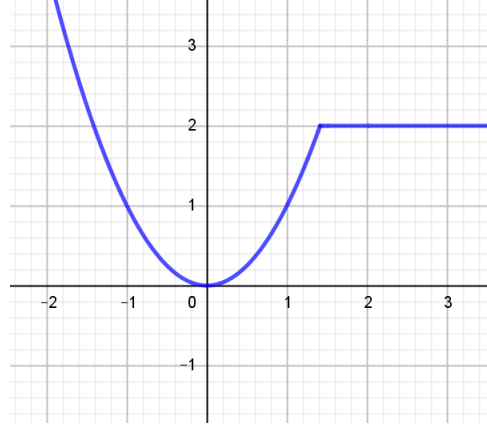


أسئلة استرشادية للصف الثانى الثانوى

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?

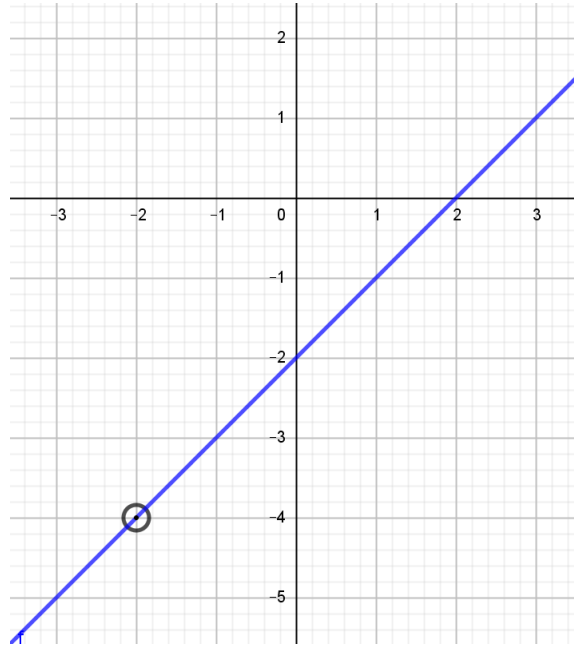
- a) $x + y^2 = 3$
- b) $x^2 + y = 8$
- c) $x^2 + y^2 = 25$
- d) $x = 5$

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



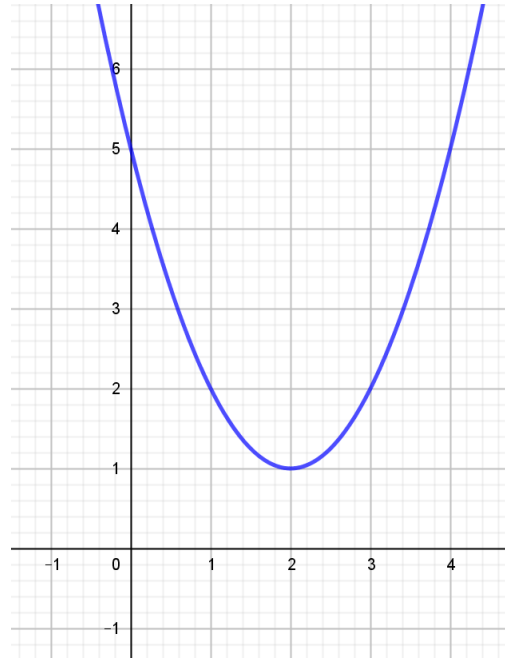
4- In the triangle ABC the expression $\frac{b^2 + c^2 - a^2}{bc} = \dots\dots\dots$

- 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

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



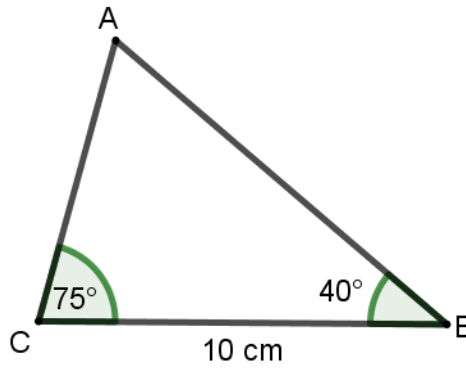
- a) = 2
- b) = 5
- c) = 1
- d) Not exist

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 $b = \dots\dots\dots$ 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