وزارة التربية والتعليم و التعليم الفنى
الإدارة المركزية للتعليم العام
إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم الفنى
السيد الأستاذ/ محمد عبد اللطيف

وتوجيهات رئيس الإدارة المركزية للتعليم العام

د/ هالة عبد السلام خفاجى

إشراف علمي
مستشار الرياضيات
أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات العامة لغات

للصف الثانى الثانوي "أدبـــى"
الفصل الدراسى الأول
للعام الدراسي 2025 / 2026

الأسبوع الخامس

لجنة الإعداد
أ/ إيهاب فتحى د/ مدحت عطية شعراوى أ/ عفاف جاد

ترجمة
أ/ السيد أحمد

مراجعة الترجمة
أ/ شريف البرهامى

❺ الرياضيات العامة لغات ـ للصف الثانى الثانوي ـ الشعبة الأدبية ـ الأداء الصفى ـ الأسبوع الخامس ❺

1- Use the curve of the function f where $f(x) = x^2$ to represent the functions:

a) $g(x) = x^2 + 2$ b) $h(x) = (x + 2)^2$

2- Graph the curve of the function f where $f(x) = 3 - (x - 1)^2$, from the graph deduce the range of the function and invistegate its monotony from the graph.

3- Use the curve of the function f where $f(x) = x^3$ to represent the functions:

a) $g(x) = x^3 - 3$ b) $h(x) = 1 - (x + 2)^3$

4- Graph the curve of the function f where $f(x) = (x - 1)^3 + 2$, from the graph deduce the range of the function and invistegate its monotony from the graph.

5- Use the curve of the function f where $f(x) = |x|$ to represent the functions:

a) $g(x) = |x + 1|$ b) $h(x) = 2 - |x|$

6- Graph the curve of the function f where $f(x) = |x - 2| - 3$, from the graph deduce the range of the function and invistegate its monotony from the graph.

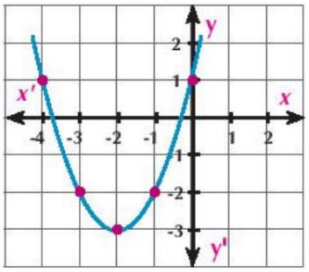
7- Use the curve of the function f where $f(x) = \frac{1}{x}$ to represent the functions:

a) $g(x) = \frac{1}{x} + 1$ b) $h(x) = 2 - \frac{1}{x+3}$

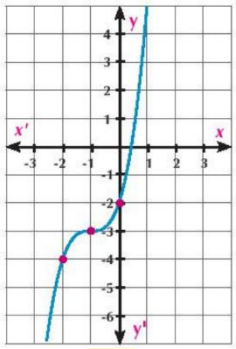
8- Graph the curve of the function f where $f(x) = \frac{1}{x-1}$, from the graph deduce the range of the function and invistegate its monotony from the graph.

9- Write the rule of the function represented grsphically by the following graph:

a)



b)



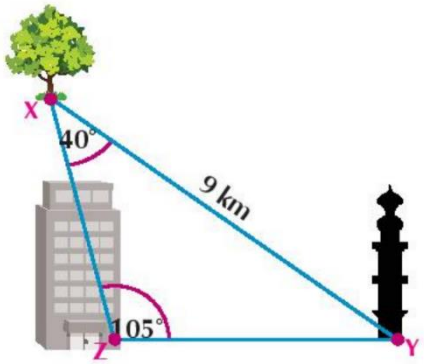
10- Find: $\lim_{x \to 3} \frac{x^2-9}{x-3}$

11- Find: $\lim_{x \to 2} \frac{x^2+3x-10}{x-2}$

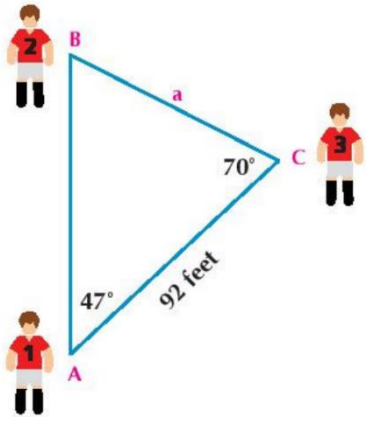
12- Find: $\lim_{x \to -3} \frac{x^3+27}{x+3}$

13- Find: $\lim_{x \to 3} \frac{x^3-8}{x^2-x-2}$

14- In the opposite figure there are three geographical positions forming a triangle. If the distance between position X and position Y is 9 Km and measure of the angle at position X is 40° and measure of the angle at position Z is 105°, then find the distance between position X and position Z to the nearest km.



15- The opposite figure represents three players from a football team during a match. Find the distance between the second player (at point B) and the third player (at point C).



❺ الرياضيات العامة لغات ـ للصف الثانى الثانوي ـ الشعبة الأدبية ـ الأداء المنزلى ـ الأسبوع الخامس ❺

1- Use the curve of the function f where $f(x) = x^2$ to represent the functions:

a) $g(x) = 1 - x^2$ b) $h(x) = (x-1)^2$

2- Graph the curve of the function f where $f(x) = (x+3)^2 + 2$, from the graph deduce the range of the function and invistegate its monotony from the graph.

3- Use the curve of the function f where $f(x) = x^3$ to represent the functions:

a) $g(x) = x^3 + 1$ b) $h(x) = (x-2)^3 + 1$

4- Graph the curve of the function f where $f(x) = 3 - (x+1)^3$, from the graph deduce the range of the function and invistegate its monotony from the graph.

5- Use the curve of the function f where $f(x) = |x|$ to represent the functions:

a) $g(x) = |x-2|$ b) $h(x) = 2 - |x|$

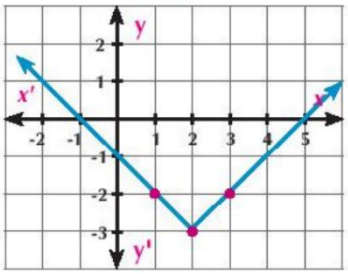
6- Graph the curve of the function f where $f(x) = |x+3| - 1$, from the graph deduce the range of the function and invistegate its monotony from the graph.

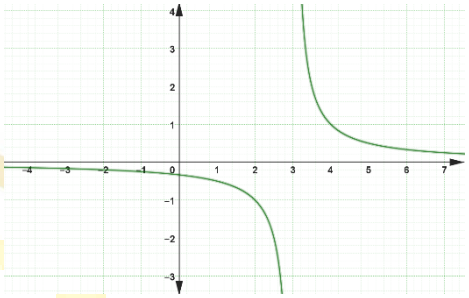
7- Use the curve of the function f where $f(x) = \frac{1}{x}$ to represent the functions:

a) $g(x) = \frac{1}{x} - 2$ b) $h(x) = \frac{1}{x+1} + 2$

8- Graph the curve of the function f where $f(x) = \frac{-1}{x-3}$, from the graph deduce the range of the function and invistegate its monotony from the graph.

9- Write the rule of the function represented graphically by the following graph:

a) 

b) 

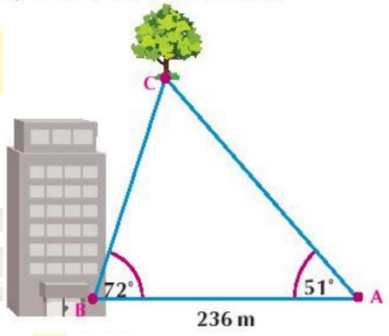
10- Find: $\lim_{x \to 2} \frac{x^2-4}{x-2}$

11- Find: $\lim_{x \to 3} \frac{x^2-2x-3}{x-3}$

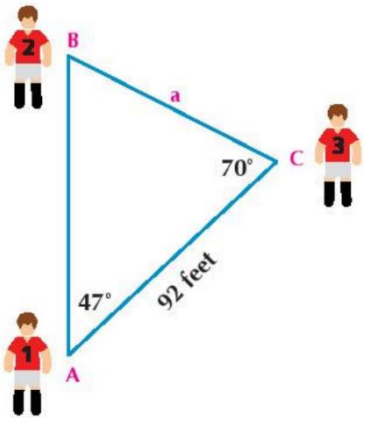
12- Find: $\lim_{x \to -2} \frac{x^3+8}{x+2}$

13- Find: $\lim_{x \to -3} \frac{x^2-9}{x^2-2x-15}$

14- In the opposite figure there are three geographical positions forming a triangle.
If the distance between position A and position B is 236 meters and measure of the angle at position B is 72° and measure of the angle at position A is 51°, then find the distance between position C and position B to the nearest km.



15- The opposite figure represents three players from a football team during a match. Find the distance between the first player (at point A) and the second player (at point B).

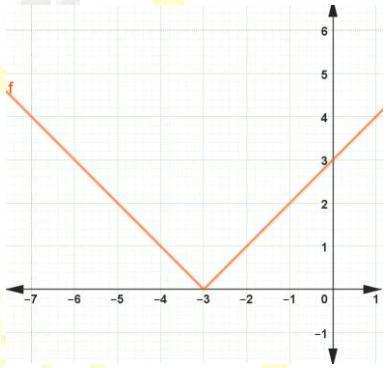


First Group

1- Graph the curve of the function *f* where $(x) = (x-1)^2$, from the graph deduce the range of the function.

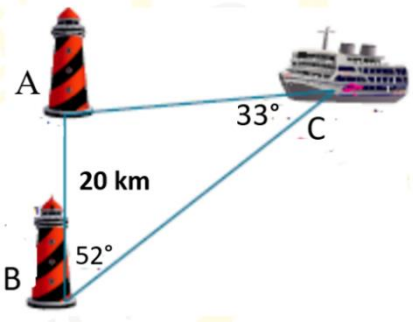
2- Graph the curve of the function *f* where $(x) = x^3 + 2$, invistegate its monotony from the graph.

3- Write the rule of the function *f* represented graphically by the following graph:



4- Find $\lim_{x \to 1} \frac{x^2-1}{x-1}$

5- The opposite figure represents two light houses A and B, the distance between them is 20 km lie on one line from the Nourth to the South, A ship at position C such that m (∠ ACB) = 33° , m (∠ ABC) = 52°.
Find the distance between the ship and the light house A to the nearest km

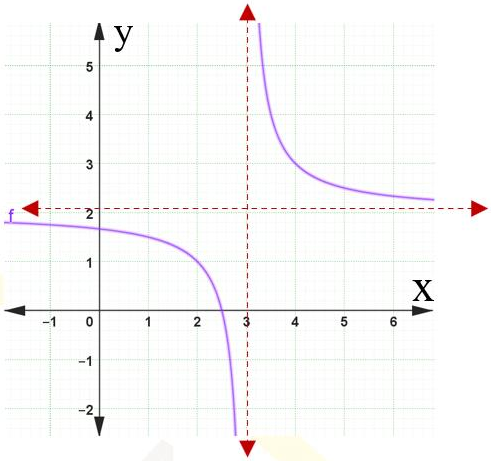


Second Group

1) Graph the curve of the function f where $f(x) = (x+3)^2$, from the graph deduce the range of the function.

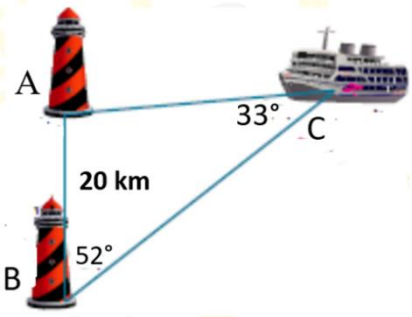
2) Graph the curve of the function f where $f(x) = x^3 - 1$, invistegate its monotony from the graph.

3) Write the rule of the function f represented graphically by the following graph:



4) Find $\lim_{x \to 5} \frac{x^2-25}{x-5}$

5) The opposite figure represents two light houses A and B, the distance between them is 20 km lie on one line from the Nourth to the South, A ship at position C such that m (∠ ACB) = 33° , m (∠ ABC) = 52°.
Find the distance between the ship and the light house B to the nearest km

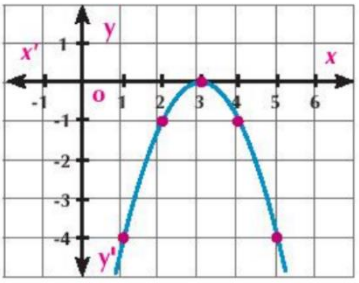


Third Group

1) Graph the curve of the function f where $f(x) = (x-2)^3$, from the graph deduce the range of the function.

2) Graph the curve of the function f where $f(x) = x^2 + 1$, invistegate its monotony from the graph.

3) Write the rule of the function f represented graphically by the following graph.



4) Find $\lim_{x \to 4} \frac{x^2-16}{x-4}$

5) The opposite figure represents the position of three Egyption cities forming a triangle, if the distance between Cairo and Suez is 134 km. measure of the angle at Suez is 30° and measure of the angle at Fayoum is 40°
Find the distance between Cairo and Suez to the nearest km