Lycée qualifiant Tariq Ben Zyad Niveau : 2BACSHF	❖ DEVOIR SURVEILLÉ N° 1 ❖ Semestre 2 – ZipGrade B	Professeur : Bouyguir Taher www.proftaher.com

Nom et prénom : ..... Numéro : .....

Exercice 1 : QCM – questions 1 à 10

On considère $f(x) = x^2 + 3x + 1$. Cocher la ou les réponses correctes.

1. D_f :

☐ A. $]-\infty;+\infty[$ ☐ B. $]-\infty;0[\cup]0;+\infty[$ ☐ C. $[0;+\infty[$ ☐ D. $]-\infty;0]$

2. $f(1)$:

☐ A. 5 ☐ B. 6 ☐ C. 4 ☐ D. 1

3. $f(0)$:

☐ A. 3 ☐ B. 1 ☐ C. 4 ☐ D. 0

4. $f(-3)$:

☐ A. 0 ☐ B. 1 ☐ C. 19 ☐ D. -2

5. $\lim\limits_{x\to+\infty} f(x)$:

☐ A. x^2 ☐ B. $+\infty$ ☐ C. 1 ☐ D. $-\infty$

6. $\lim\limits_{x\to-\infty} f(x)$:

☐ A. x^2 ☐ B. $+\infty$ ☐ C. 3 ☐ D. $-\infty$

7. $f'(x)$:

☐ A. $x+3$ ☐ B. $2x+3$ ☐ C. $3x+2$ ☐ D. $2x^2+3$

8. $f'(-1)$:

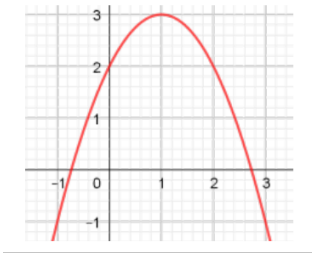
☐ A. 0 ☐ B. 1 ☐ C. -1 ☐ D. -3

9. Solution de $2x+3=0$

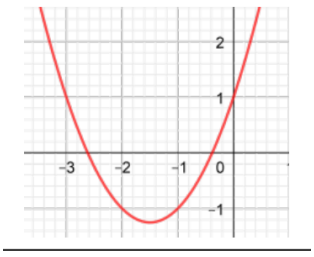
☐ A. -5 ☐ B. $-\frac{3}{2}$ ☐ C. $\frac{3}{2}$ ☐ D. 1

10. La courbe représentative de f est :

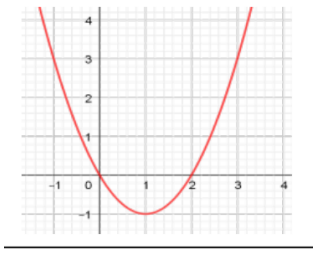
☐ A



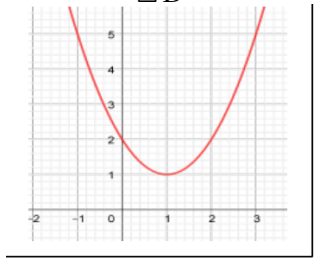
☐ B



☐ C



☐ D



Exercice 2 : QCM – questions 11 à 20

On considère $g(x) = \sqrt{x-2}$. Cocher la ou les réponses correctes.

11. D_g :

☐ A. $]-\infty;+\infty[$ ☐ B. $[-2;+\infty[$ ☐ C. $[1;+\infty[$ ☐ D. $[2;+\infty[$

12. $g(2)$:

☐ A. -2 ☐ B. 0 ☐ C. $\sqrt{4}$ ☐ D. 1

13. $g(6)$:

☐ A. 2 ☐ B. $\sqrt{8}$ ☐ C. -2 ☐ D. 4

14. $g(5)$:

☐ A. 3 ☐ B. $\sqrt{3}$ ☐ C. 9 ☐ D. -1

15. $\lim\limits_{x\to+\infty} g(x)$:

☐ A. $+\infty$ ☐ B. $-\infty$ ☐ C. -2 ☐ D. 0

16. $\lim\limits_{x\to 2^+} g(x)$:

☐ A. $-\infty$ ☐ B. $+\infty$ ☐ C. 0 ☐ D. -2

17. $g'(x)$:

☐ A. $\frac{2}{\sqrt{x-2}}$ ☐ B. $-\frac{1}{2\sqrt{x-2}}$ ☐ C. $-\frac{2}{\sqrt{x-2}}$ ☐ D. $\frac{1}{2\sqrt{x-2}}$

18. Dérivabilité en 2

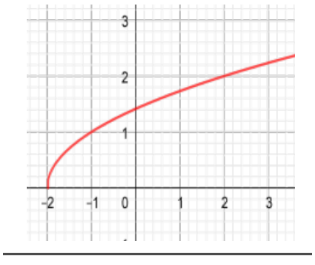
☐ A. $g'(2) = 0$ ☐ B. Non dérivable en 2. ☐ C. $g'(2) = \frac{1}{4}$ ☐ D. $g'(2) = 1$

19. Solution de $x - 2 = 0$

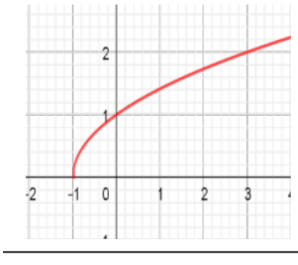
☐ A. -2 ☐ B. 1 ☐ C. 0 ☐ D. 2

20. La courbe représentative de g est :

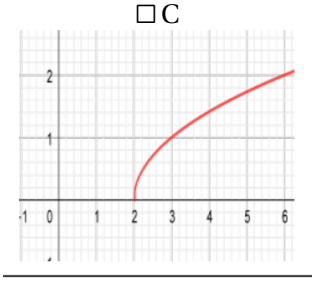
☐ A



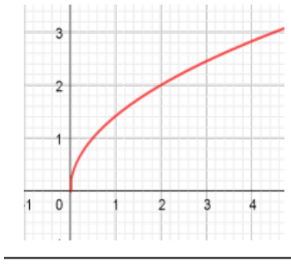
☐ B



☐ C



☐ D



Bon courage! ☺