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

Nom et prénom : ..... Numéro : .....

Exercice 1 : QCM – questions 1 à 10

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

1. D_f :

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

2. $f(1)$:

☐ A. 0 ☐ B. 5 ☐ C. 3 ☐ D. 1

3. $f(0)$:

☐ A. -1 ☐ B. 0 ☐ C. 1 ☐ D. 2

4. $f(-1)$:

☐ A. -2 ☐ B. -1 ☐ C. 0 ☐ D. 5

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

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

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

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

7. $f'(x)$:

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

8. $f'(1)$:

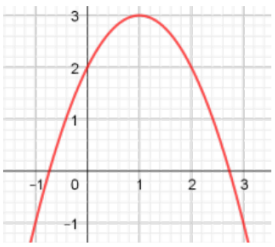
☐ A. 1 ☐ B. 5 ☐ C. 2 ☐ D. 0

9. Tangente en 1

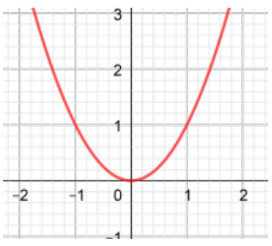
☐ A. $y = x - 2$ ☐ B. $x = 2$ ☐ C. $y = x - 1$ ☐ D. $y = 1$

10. La courbe représentative de f est :

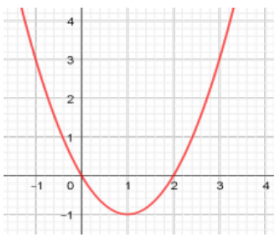
☐ A



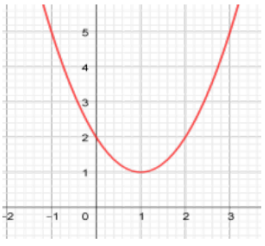
☐ B



☐ C



☐ D



Exercice 2 : QCM – questions 11 à 20

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

11. D_g :

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

12. $g(1)$:

☐ A. $\sqrt{2}$ ☐ B. 0 ☐ C. $-\sqrt{2}$ ☐ D. 2

13. $g(3)$:

☐ A. 0 ☐ B. -2 ☐ C. -4 ☐ D. 2

14. $g(\frac{3}{2})$:

☐ A. 1 ☐ B. $\sqrt{\frac{8}{2}}$ ☐ C. $\frac{1}{2}$ ☐ D. $-\frac{3}{2}$

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

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

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

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

17. $g'(x)$:

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

18. Dérivabilité en 1

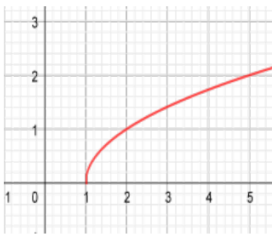
☐ A. $g'(1) = 2$ ☐ B. Non dérivable en 1. ☐ C. $g'(1) = 0$ ☐ D. $g'(1) = 1$

19. Solution de $2x - 2 = 0$

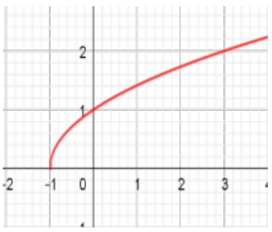
☐ A. 1 ☐ B. -1 ☐ C. 0 ☐ D. 4

20. La courbe représentative de g est :

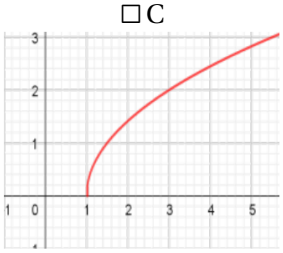
☐ A



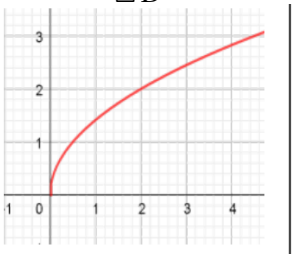
☐ B



☐ C



☐ D



Bon courage! ☺