

Examen 3 (pratique-solutions)

201-015 Mise à niveau

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Question 1. (10%)

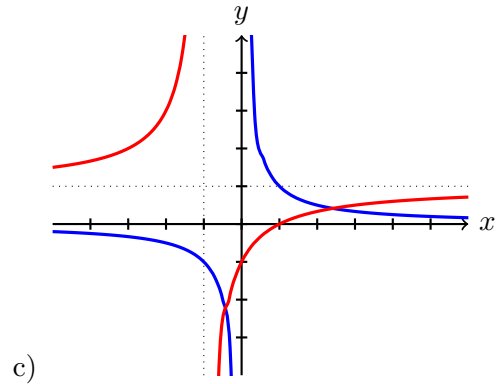
a) $\text{dom}(f(x)) = [-4.5, -2[\cup [-1, 3.5[$

b) $\text{Im}(f(x)) = [-3, 4.33]$,

c) $[-4.5, -4] \cup [-1, 1] \cup [3, 3.5[$

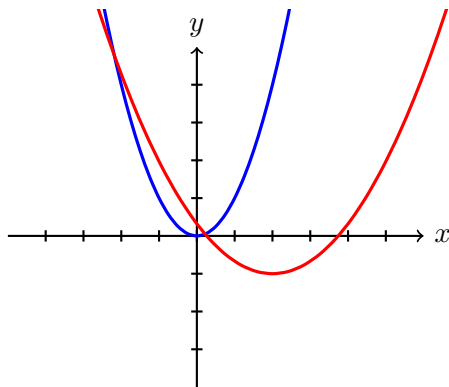
d) $x = -4, -1, 1, 3$

e) $[-3, -2] \cup [-1, 0] \cup [2, 3.5]$

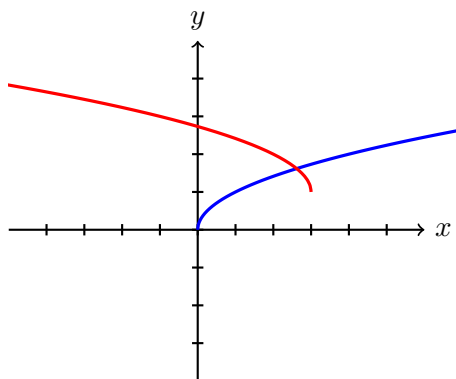


c)

Question 2. (9%)



a)



b)

Question 3. (15%)

a) $\text{dom}(f(x)) = \mathbb{R} \setminus \{5\}$

b) $\text{dom}(f(x)) = -\infty, \frac{7}{2}]$

c) $\text{dom}(f(x)) = -\infty, 2[\cup]3, 5]$

Question 4. (15%)

a) $f(x) = 3x + 3$

b) $f(x) = -\frac{2}{5}x - \frac{1}{5}$

c) $f(x) = -\frac{1}{5}x + 1.$

Question 5. (10%)

a) $f(x) = 2x^2 - 20x + 57.$

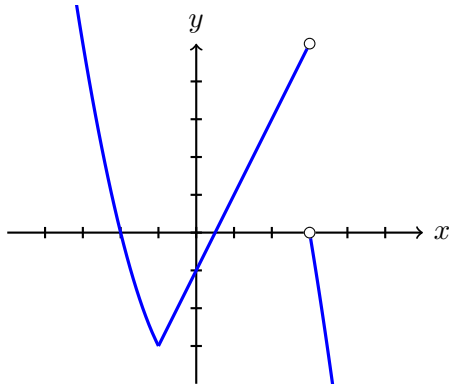
b) $f(x) = 4(x + 3)^2 - 6$

Question 6. (11%)

a) $f(2) = 3.$

b) $f(-3) = 5$

c) $f(3) \neq$

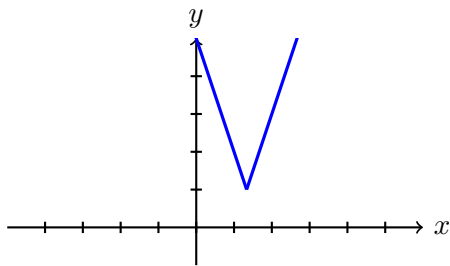


d)

Question 7. (10%)

a)

$$f(x) = \begin{cases} -3x + 5 & x \leq \frac{4}{3} \\ 3x - 3 & \frac{4}{3} < x \end{cases}$$



b)

Question 8. (10%)

a) Réflexion par rapport à l'axe des x et par rapport à l'axe de y . Étirement de facteur 2 verticale.

Translation de 4 vers la droite et de 3 vers le bas.

b) $\text{dom}(g(x)) = -\infty, 4]$

Question 9. (10%)

a) $f(x) = \frac{4x - 18}{x - 5}$

b) $f(x) = \frac{-\left(\frac{11}{4}\right)}{x + \frac{7}{2}} + \frac{3}{2}$