

1.

1.1 a) $-\frac{8}{5}$; $-\frac{19}{17}$; $7, (23)$

b) $\sqrt{30}$; $-\pi$; $\sqrt{\frac{1}{10}}$

1.2 Opção (C)

1.3 a) $-\frac{8}{5} \notin \mathbb{Z}$ b) $\sqrt[3]{64} \in \mathbb{R}^+$ c) $-\frac{19}{17} \in \mathbb{Q}^-$ d) $-\pi \in \mathbb{R}$

e) $\sqrt{30} \in \mathbb{R}$ f) $7, (23) \notin \mathbb{Z}^+$ g) $\sqrt{\frac{1}{10}} \notin \mathbb{Q}$ h) $0 \in \mathbb{Q}$

1.4. $-\pi < -\frac{5}{8} < -\frac{19}{17} < 0 < \sqrt{\frac{1}{10}} < \sqrt[3]{64} < \sqrt{30} < 7, (23)$

2. Opção (C)

3.

3.1 $11\sqrt{5}$

3.2 $8\sqrt{2}$

3.3 $-4\sqrt{11} - 13$

4.

4.1 Opção (D)

4.2 3,65

5. $E \hookrightarrow -3\sqrt{2}$

$J \hookrightarrow -9 + 2\sqrt{5}$

6. Opção (D)

7.

7.1 $a = -\pi$ e $b = \sqrt{30}$, por exemplo.

7.2 $a = -\frac{\pi}{2}$ e $b = \sqrt{5}$, por exemplo.

8.

8.1 $A = \frac{x \times y}{2}$

8.2 7,6, por exemplo.

8.3 $6,615 < A < 8,415$

9. Opção (D)

10.

10.1. $\{x \in \mathbb{R}: -\pi \leq x < \sqrt{3}\}$

10.2. a) Opção (A) b) Opção (D) c) Opção (C)

11. Opção (D)

12. O João.

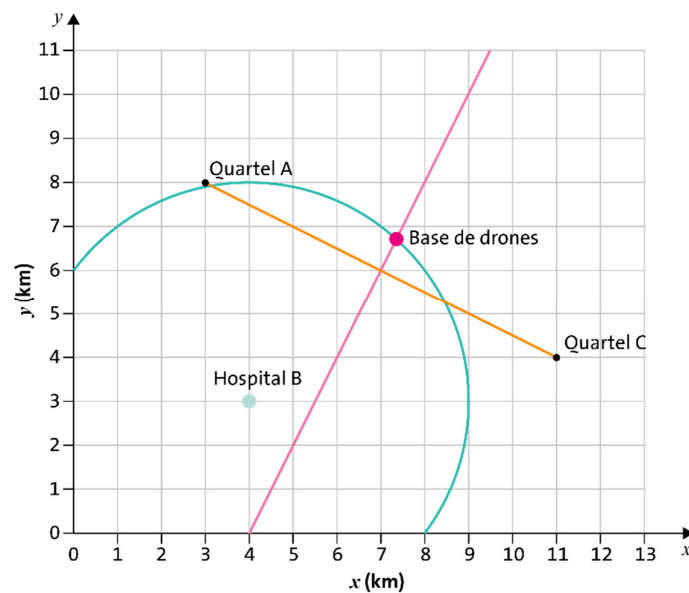
13.

13.1. C. S. = $]-\infty, 0]$

13.2. C. S. = $\left] \frac{5}{6}, +\infty \right[$

14. 8 €

15.



16.

16.1 $x = 108^\circ$; $y = 54^\circ$

16.2 $x = 63^\circ$; $y = 58,5^\circ$

16.3 $x = 100^\circ$; $y = 118^\circ$