



MTM3100 - Pré-cálculo

Gabarito parcial da 7ª lista complementar de exercícios

1. (a) $S = \left\{-6, -4, -2, 0, \frac{1}{4}, 3, 12\right\}$;
(b) $S = \left\{-6, -4, -2, 0, \frac{1}{4}, 12\right\}$.
2. (a) $S = \emptyset$; (b) $S = \{2\}$; (c) $S = \{5\}$.
3. (a) $S = \emptyset$;
(b) $S = \{2\}$;
(c) $S = \{5\}$.
4. (a) $S = \{-2, -1, 1, 2\}$; (b) $S = \{-1, \sqrt[3]{2}\}$; (c) $S = \{-\sqrt[4]{7}, -1, 1, \sqrt[4]{7}\}$.
5. (a) $S = \left\{-\frac{1}{2}, \frac{1}{2}, 2, 3\right\}$; (b) $S = \{1, 3\}$.
6. (a) $S = \left\{-\frac{3}{2}, \frac{1}{3}, 1\right\}$; (b) $S = \mathbb{R}$.
7. (a) $S = \{2, 4\}$; (b) $S = \left[\frac{2}{3}, \infty\right)$; (c) $S = \left[\frac{4}{3}, \infty\right)$.
8. (a) $S = \{-2, 2\}$; (b) $S = \{-2, -1, 1, 2\}$.
9. (a) $S = [2, 5]$; (b) $S = (-\infty, 0) \cup (1, \infty)$.
10. (a) $S = \{-4\}$; (b) $S = \left\{\frac{7 - \sqrt{33}}{4}, \frac{7 + \sqrt{33}}{4}\right\}$; (c) $S = \left\{0, \frac{7}{3}\right\}$;
(d) $S = \{13\}$; (e) $S = \{3\}$; (f) $S = \{3, 4\}$;
(g) $S = \{0\}$; (h) $S = \left\{0, \frac{1}{4}\right\}$.
11. (a) $S = \emptyset$; (b) $S = \{34\}$; (c) $S = \{1, 17\}$.

- 12.** (a) $S = \left\{ \frac{7}{4} \right\}$; (b) $S = \{-16\}$; (c) $S = \{-3, 4\}$;
(d) $S = \{-2, 0, 3\}$; (e) $S = \{0\}$.
- 13.** (a) $S = \{1, 2^{2/3}\}$; (b) $S = \{4, 9\}$;
(c) $S = \emptyset$; (d) $S = \{81\}$;
(e) $S = \{2\sqrt{2}, 3\sqrt{3}\}$; (f) $S = \{-1, 0, 3\}$;
(g) $S = \{2\}$.
- 14.** (a) $S = \{6\}$; (b) $S = \{11\}$;
(c) $S = \{0\}$; (d) $S = \{-2, -1\}$;
(e) $S = \{-76, 76\}$; (f) $S = \{1, 4\}$;
(g) $S = \{27, 729\}$.
- 15.** $40,53 m$, aproximadamente.
- 16.** $2 m$, $6 m$ e $15 m$.
- 17.** $\sqrt[3]{99} mm$ que é, aproximadamente, $4,626 mm$.
- 18.** $13 cm$.