

## Worksheet: Relations and Functions

Punjab State Board · Class 11 · Mathematics · 3 questions · 12 marks

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 12

**Q1.** If  $A = \{1, 2\}$  and  $B = \{a, b, c\}$ , find  $A \times B$  and state  $n(A \times B)$ . [2 marks]

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**Q2.** Find the domain and range of  $f(x) = (9 - x^2)$ . [4 marks]

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**Q3.** Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be defined by  $f(x) = 2x+3$ . Prove that  $f$  is bijective. [6 marks]

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