



Database Design & ERDs

Chapter: SQL • Level ★★ • Time: 30 min

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

✓ Model entities and relationships ✓ Draw ERDs ✓ One-to-many vs many-to-many ✓ Junction tables



Section A • Concept Check

• BEGINNER

4 × 1 = 4

- 1 An ERD shows:
☐ A. entities and relationships ☐ B. errors
☐ C. styles ☐ D. servers
- 2 One customer, many orders is:
☐ A. 1:1 ☐ B. 1:N ☐ C. N:M ☐ D. 0:0
- 3 Many-to-many needs a:
☐ A. junction table ☐ B. bigger column
☐ C. trigger ☐ D. view
- 4 students-courses is naturally:
☐ A. 1:1 ☐ B. 1:N ☐ C. N:M ☐ D. none



Section B • Problem Solving

• INTERMEDIATE

2 + 3 × 3 = 11

- 5 A real-world thing (user, order) is an _____
- 6 1:N means one parent, many _____
- 7 Design tables for authors and books (an author writes many books).

- 8 Design students-courses enrolment.

- 9 Why not store a list of course ids in one column?



Section C • Challenge

• CHALLENGE

5

- 10 What relationship is passport-person?

🧠 Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

✂ ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-B 3-A 4-C | 5 entity 6 children 7 = authors(id,...), books(id, author_id FK, ...)
 8 = students, courses, enrolments(student_id, course_id) 9 = Breaks 1NF - impossible to query/join properly
 | 10 = 1:1