

Exercise walk-through

Physical Vulnerabilities and Attacks ■ 2.2

eXercise

You must be able to

- distinguish **piggybacking** 尾随（获许可） from **tailgating** 尾随（未察觉）
- describe shoulder surfing, dumpster diving, and card cloning
- rate physical risk as high, moderate, or low with a reason

Method — Piggybacking vs tailgating

Piggybacking tricks an authorised person into holding the door (with their cooperation). Tailgating slips in behind them without their knowledge. The difference is whether the victim is aware.

Method — Rating physical risk

High = sensitive systems in a space with no controlled access. Moderate = an unimportant area that is a foothold to reach other resources. Low = a low-value asset unlikely to be attacked.

Practice 2.1 ■ 2 marks

State the difference between **piggybacking** and **tailgating**.

Solution 2.1

Method: Piggybacking vs tailgating

Worked steps

piggybacking tricks an authorised person into helping/holding the door **B1**; tailgating slips in unnoticed without their knowledge **B1**.

Practice 2.2 ■ 2 marks

Describe **shoulder surfing**.

Solution 2.2

Worked steps

watching a user as they enter a password or read sensitive information **B1**, sometimes recording it for later **B1**.

Practice 2.3 ■ 1 mark

A server with customer data sits in an unlocked room off an unmonitored hallway.

- (a) State the risk level (high/moderate/low).
- (b) Justify your answer.

Solution 2.3

Method: Rating physical risk

Worked steps

(a) high **B1**. (b) sensitive data with no controlled access makes it high-impact and easy to exploit **B1**.

Exam-style 3.1 ■ 1 mark

Slipping through a secure door behind someone WITHOUT their knowledge is

A piggybacking

B tailgating

C shoulder surfing

D card cloning

Solution 3.1

Method: Piggybacking vs tailgating

A piggybacking

B tailgating



C shoulder surfing

D card cloning

Worked steps

B. tailgating is unnoticed; piggybacking is with consent.

Exam-style 3.2 ■ 1 mark

A locked warehouse of non-critical computers that could be a foothold to other systems is best rated as

A high risk

B moderate risk

C low risk

D no risk

Solution 3.2

Method: Rating physical risk

A high risk

B moderate risk



C low risk

D no risk

Worked steps

B. a foothold to other resources is the classic moderate risk.

Exam-style 3.3 ■ 1 mark

An attacker copies an employee's access card.

- (a) Name this attack.
- (b) State one consequence of a successful attack.

Solution 3.3

Worked steps

(a) card cloning **B1**. (b) the attacker can enter any area the employee is authorised for **B1**.