

***Fire Dynamics, 2e* (Gorbett/Pharr/Rockwell)**
Chapter 1 Introduction

1) From 2002-2011 approximately how many civilians were killed by fire each year?

- A) 3,000-4000
- B) 400-800
- C) 10,000-20,000
- D) Less than 100

Answer: A

Hints: Table 1.1

2) What is the approximate average number of firefighters killed in the line of duty each year from 2000-2010?

- A) 100
- B) 300
- C) 10,000
- D) Number not tracked

Answer: A

Hints: Table 1.2

3) The predominant factor that led to the large number of deaths at the Cocoanut Grove fire was:

- A) inward swinging doors.
- B) too many windows.
- C) large amounts of flammable liquids.
- D) understaffing.

Answer: A

Hints: Section 1.2

4) The term *fire dynamics* refers to:

- A) heat transfer.
- B) backdraft.
- C) firefighter operations.
- D) the interrelationship of fuel, heat, oxygen, chemical reactions, and the physical world.

Answer: D

Hints: Section 1.3

5) Three known conditions that can lead to firefighter fatalities are flashover, rollover, and:

- A) backdraft.
- B) room contents.
- C) arson fire behavior.
- D) weather.

Answer: A

Hints: Section 1.3

6) Fire protection professionals must utilize a full knowledge of what topics?

- A) Fuels and fuel geometry
- B) Detection
- C) Suppression
- D) All of the above

Answer: D

Hints: Section 1.3.2

7) Fire prevention professionals involved in inspections are charged with identifying conditions that:

- A) exceed design criteria for fire protection systems.
- B) adversely affect passive fire protection elements.
- C) hinder active fire protection and detection elements.
- D) include all of the above.

Answer: D

Hints: Section 1.3.2

8) What are fire investigators primarily tasked with identifying?

- A) Origin, cause, spread, responsibility, and circumstances
- B) Code violations and making corrections
- C) The design of fire protection devices and their installation
- D) None of the above

Answer: A

Hints: Section 1.3

9) How many firefighters died in the Sofa Super Store fire in 2007 due to lack of understanding of fire dynamics?

- A) 9
- B) 0
- C) 4
- D) 20

Answer: A

Hints: Section 1.1

10) The standard time-temperature curve does not take into account what kinds of fuels that are common today?

- A) Synthetic materials
- B) Flammable liquids
- C) Combustible metals
- D) Fire-resistant materials

Answer: A

Hints: Section 1.2

11) Flame spread of the soundproofing used at the Station Night Club was known to fire-testing agencies and professionals, but was not considered during which phase?

- A) Installation
- B) Fire code inspection
- C) Both A and B
- D) None of the above

Answer: C

Hints: Section 1.1

12) Study of fire dynamics helps to:

- A) provide safety for humans and structures.
- B) increase the costs of new construction.
- C) increase the value of well-protected buildings.
- D) serve only engineers.

Answer: A

Hints: Section 1.3

13) Investigators must first seek the _____ and then the _____ of a fire in order to ascertain what happened.

- A) origin; cause
- B) cause; circumstances
- C) origin; intent
- D) interested parties; origin

Answer: A

Hints: Section 1.3.3

14) What is the term used to describe the evaluation of conditions before emergencies?

- A) Preplanning
- B) Critique
- C) Drills
- D) Tabletops

Answer: A

Hints: Section 1.3.1

15) What is one factor responsible for the rapid fire development in today's built environment?

- A) The volume of commodities and synthetics
- B) Lax building codes and enforcement
- C) Failure to call 911
- D) Underfunding of the fire service

Answer: A

Hints: Section 1.3.1