Solutions

Each answer shows the steps, then the **result**.

2.1

- the scrambled output of an encryption algorithm

2.2

- the same key is used to encrypt and to decrypt; both parties must share that secret key

2.3

- $2^4 = 16$

3.1 B

- AES is the symmetric standard

3.2 B

- more possible keys means more guessing time

3.3

(a)

- sharing the single secret key safely

(b)

- a longer key has a larger keyspace so it is harder to guess, but it takes more time to encrypt and decrypt