Chapter 05

Analog-to-Digital Conversion
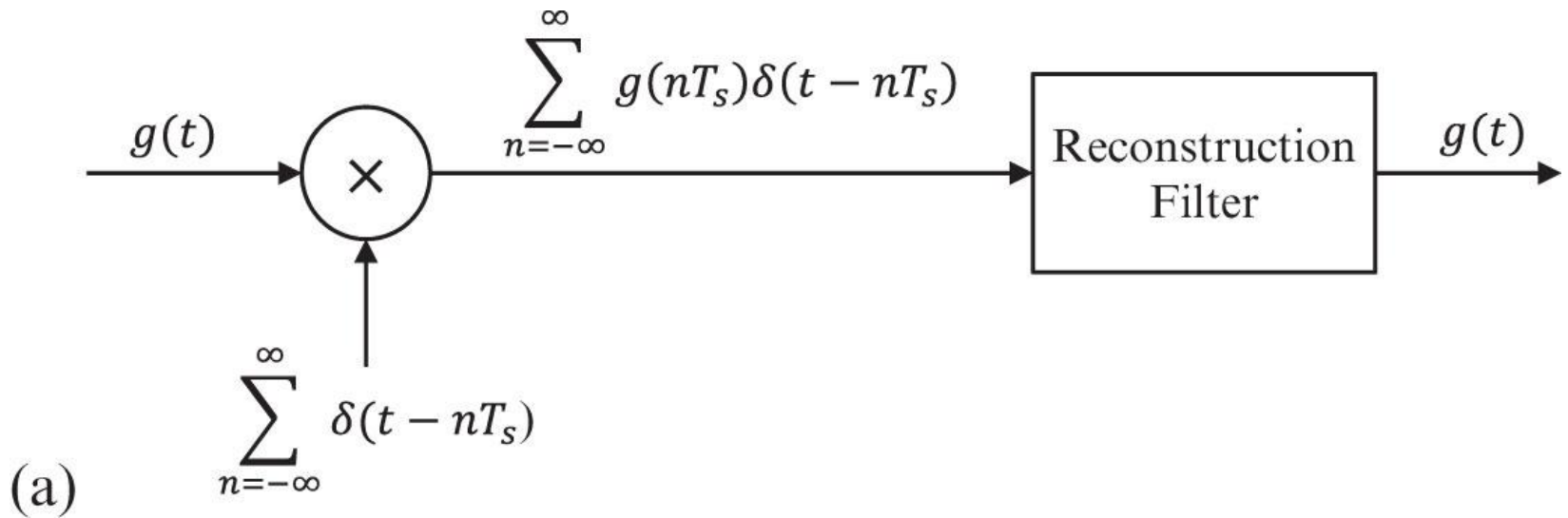
Figure 5.1a Relationship among sample space, events, and probability.
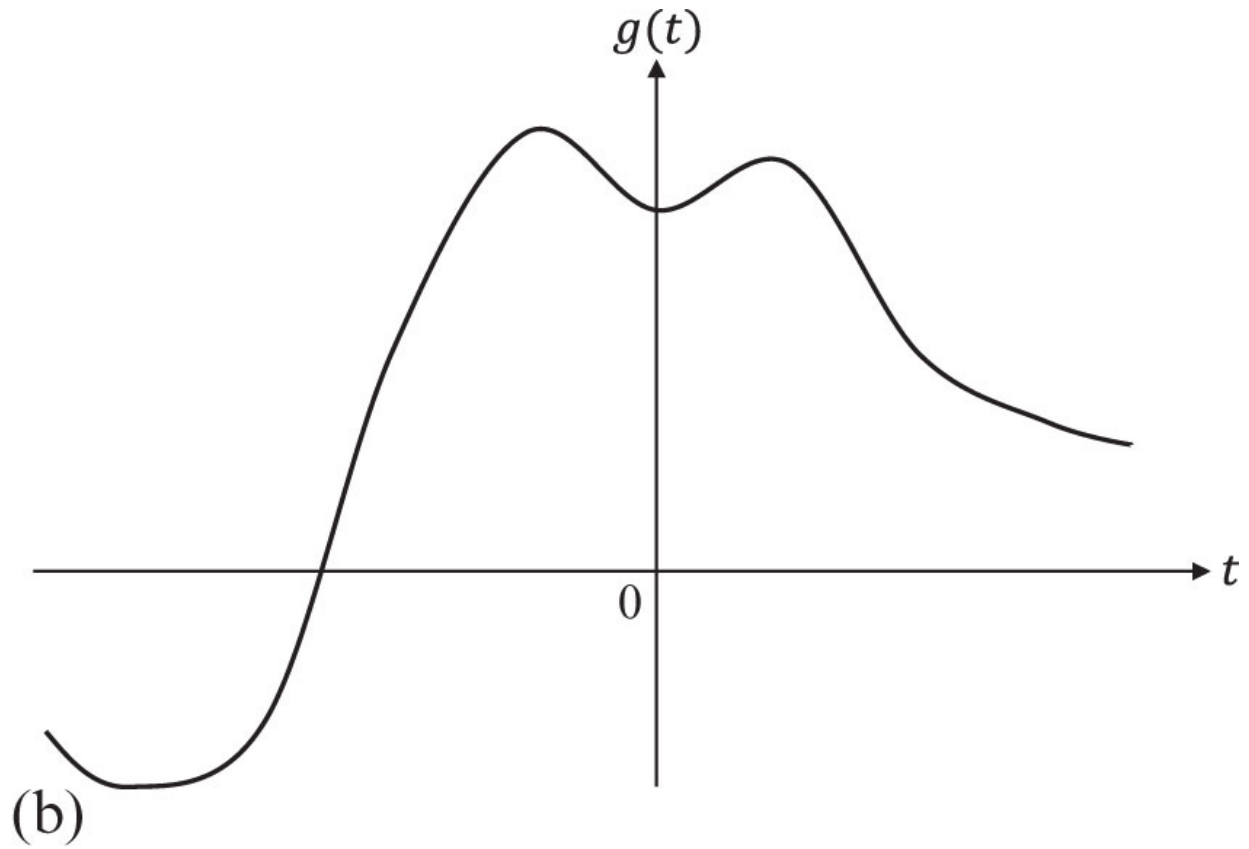
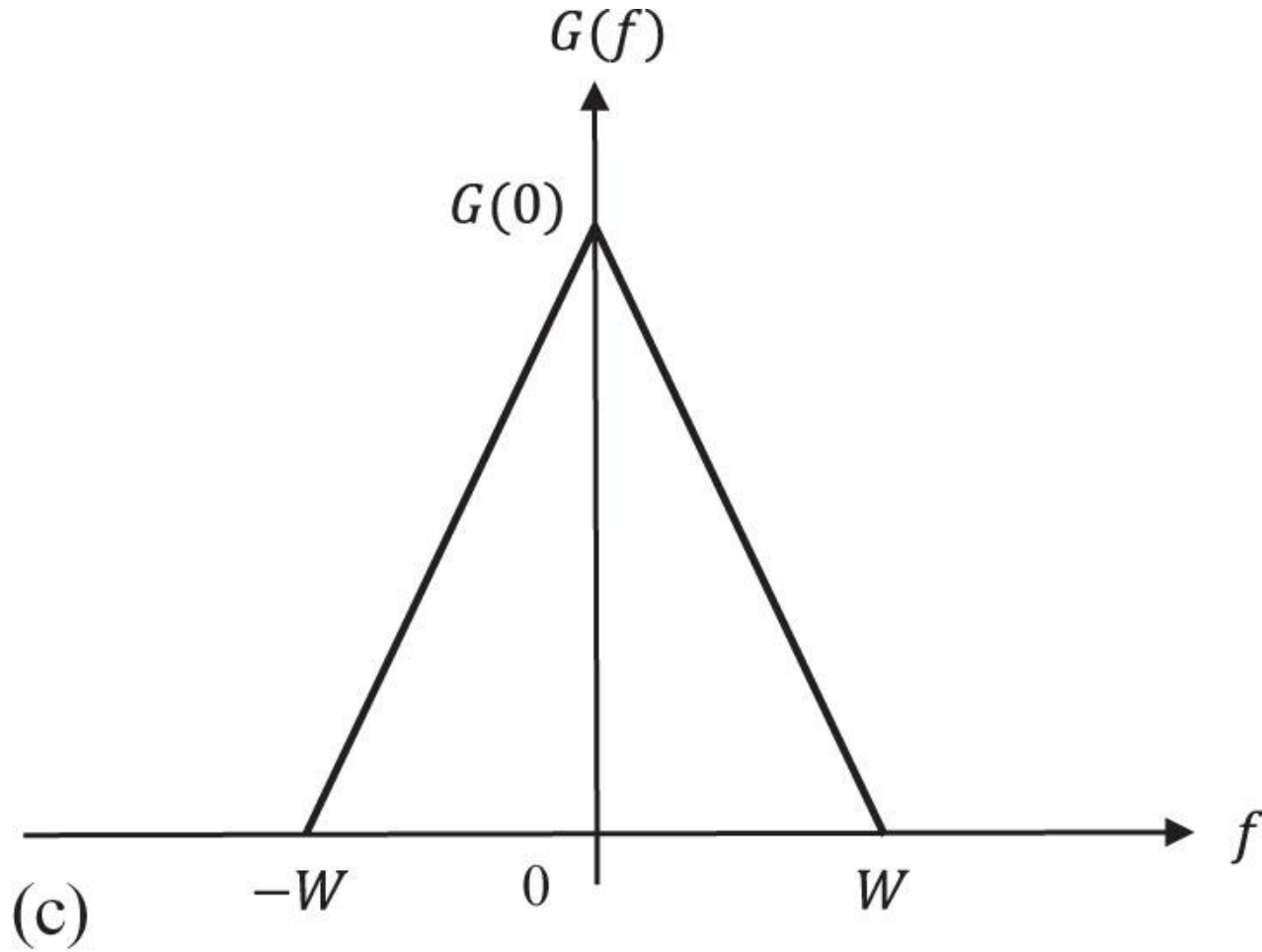**Figure 5.1b** Relationship among sample space, events, and probability.

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Figure 5.1c Relationship among sample space, events, and probability.
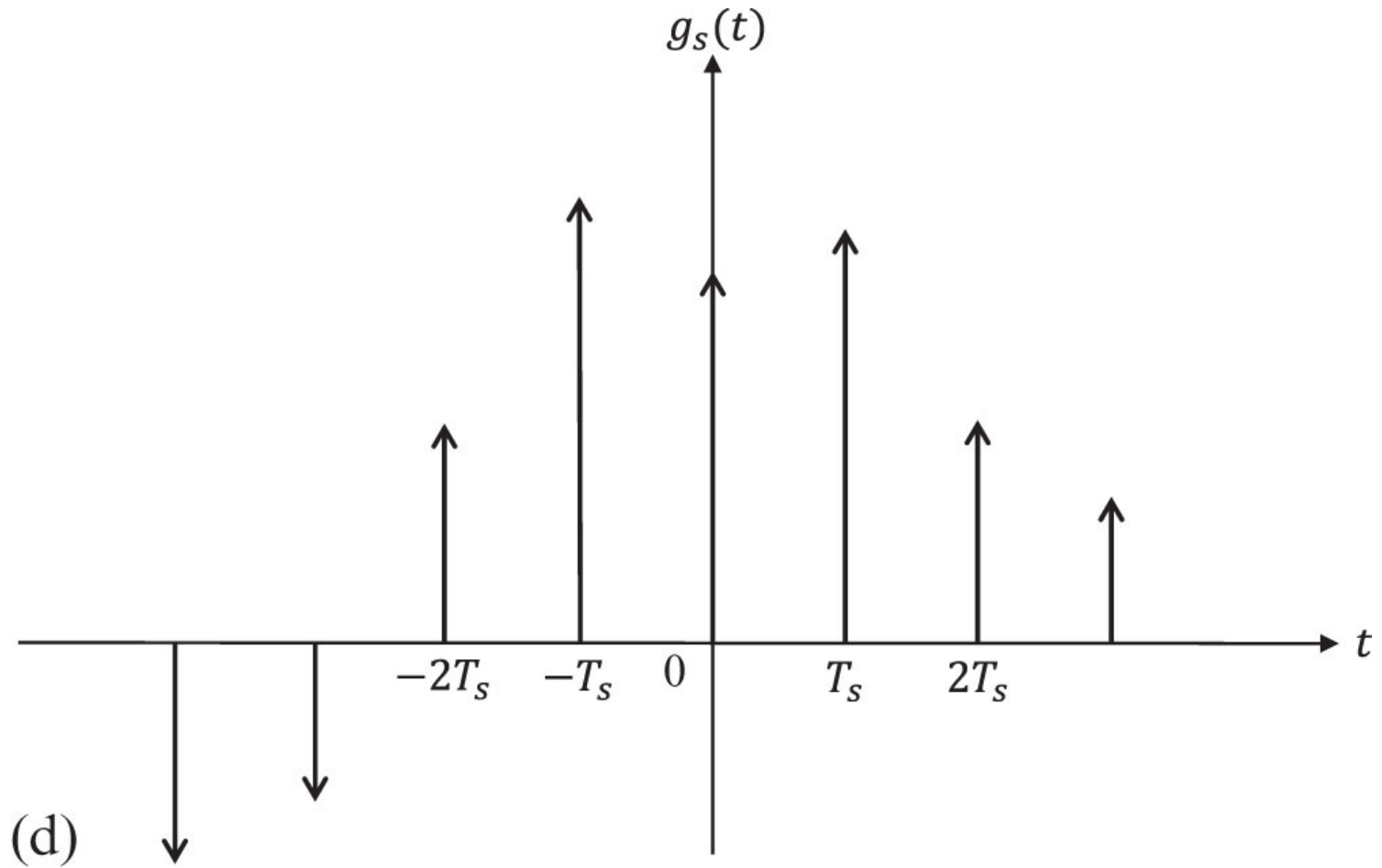
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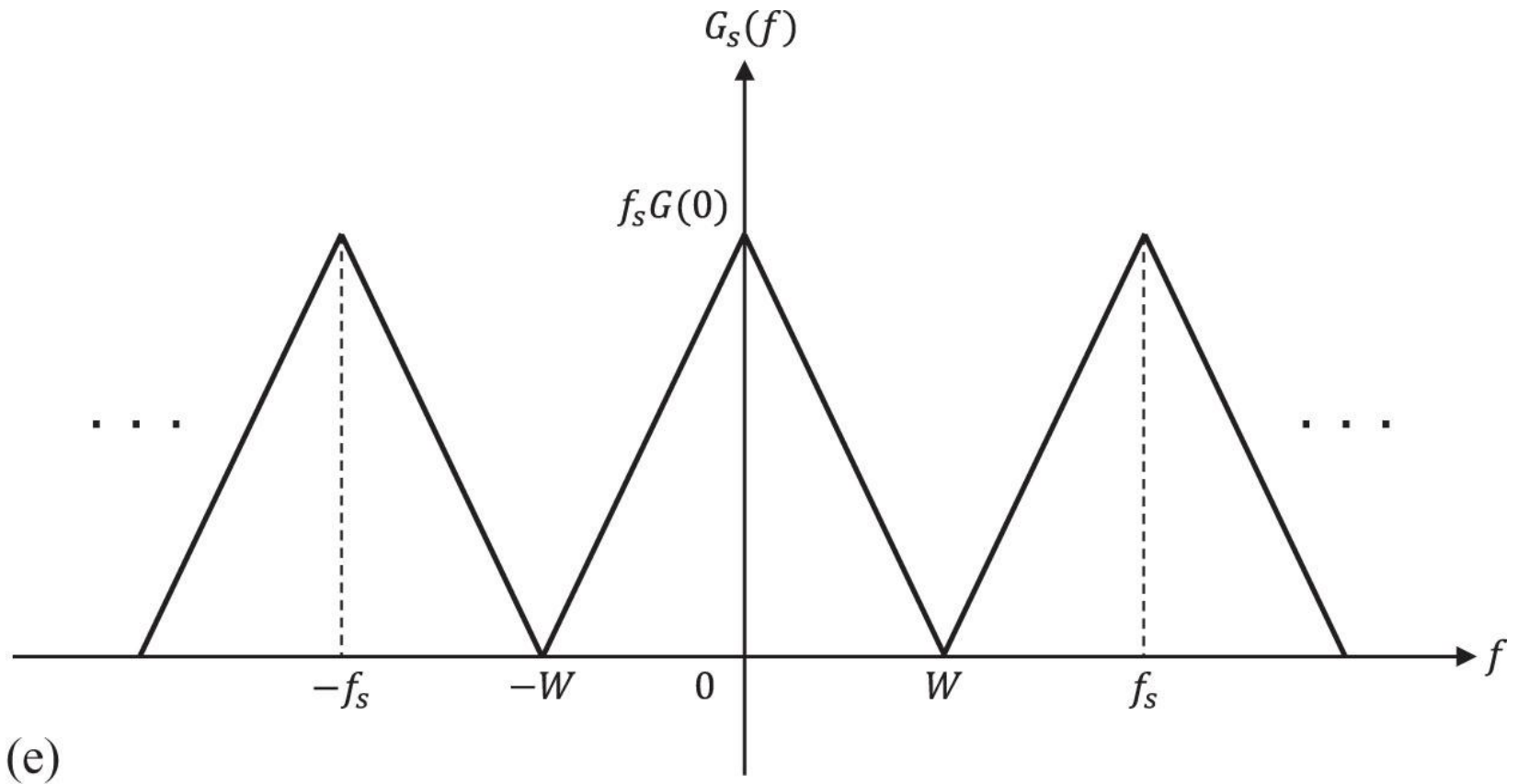**Figure 5.1d** Relationship among sample space, events, and probability.

Figure 5.1e Relationship among sample space, events, and probability.
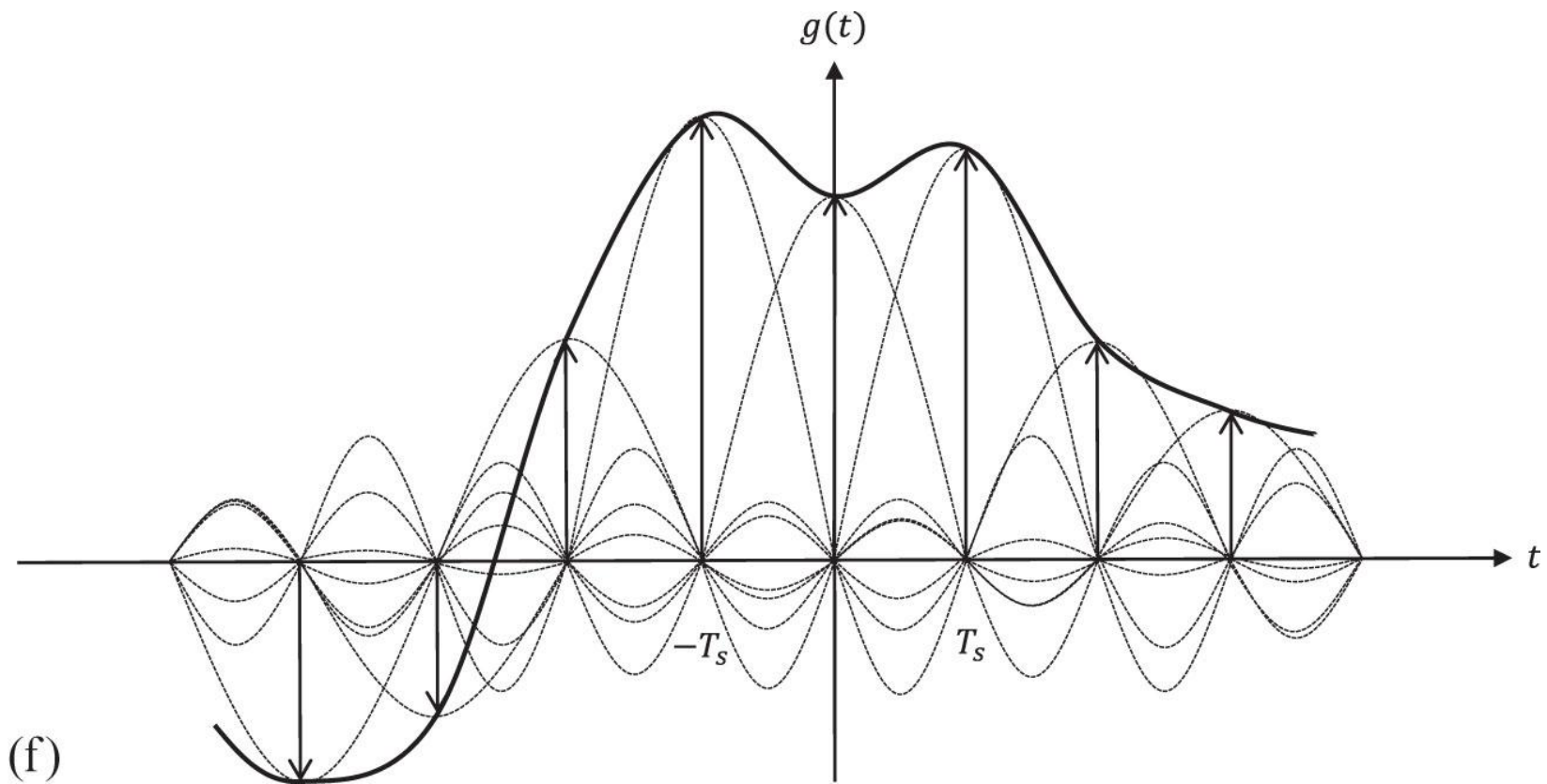
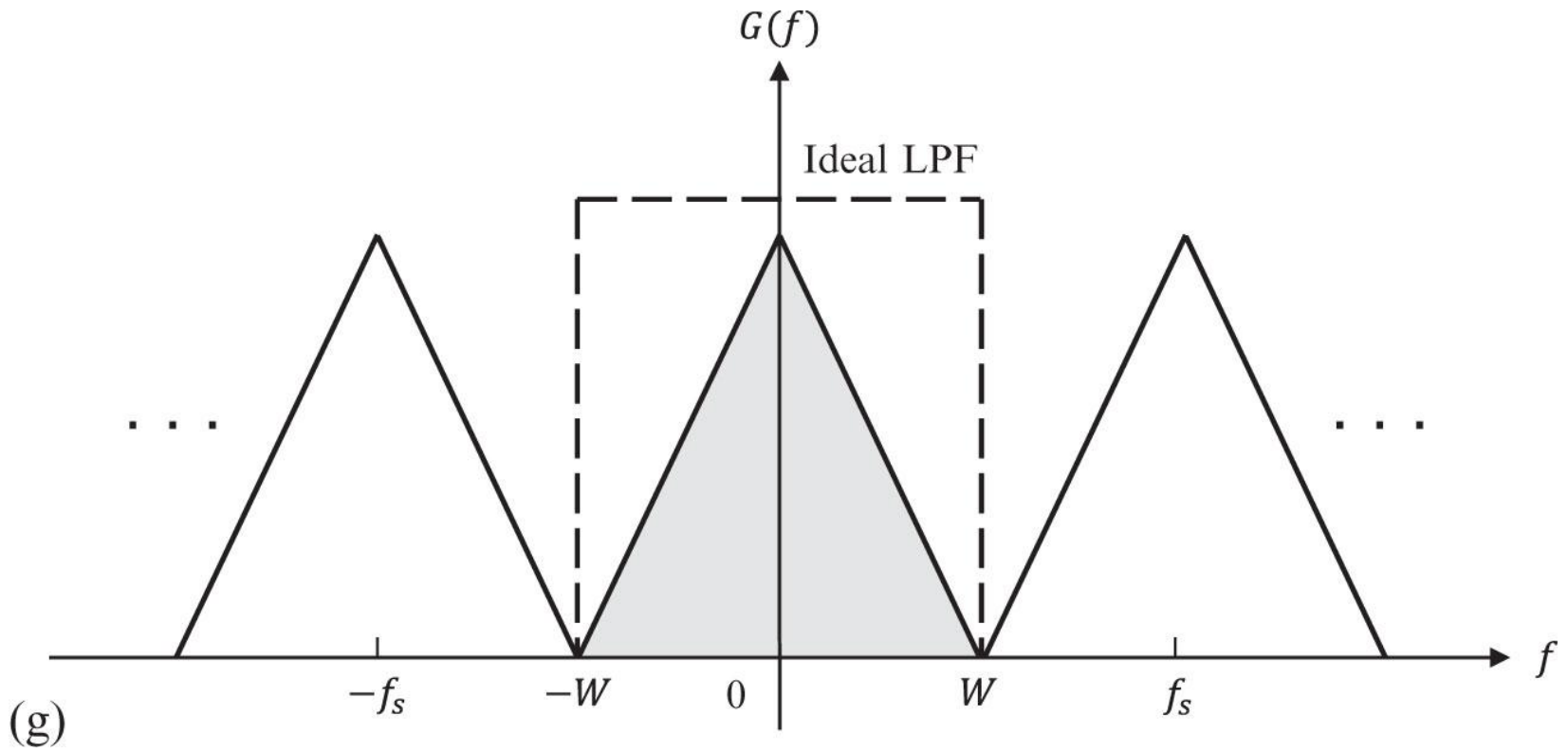**Figure 5.1f** Relationship among sample space, events, and probability.

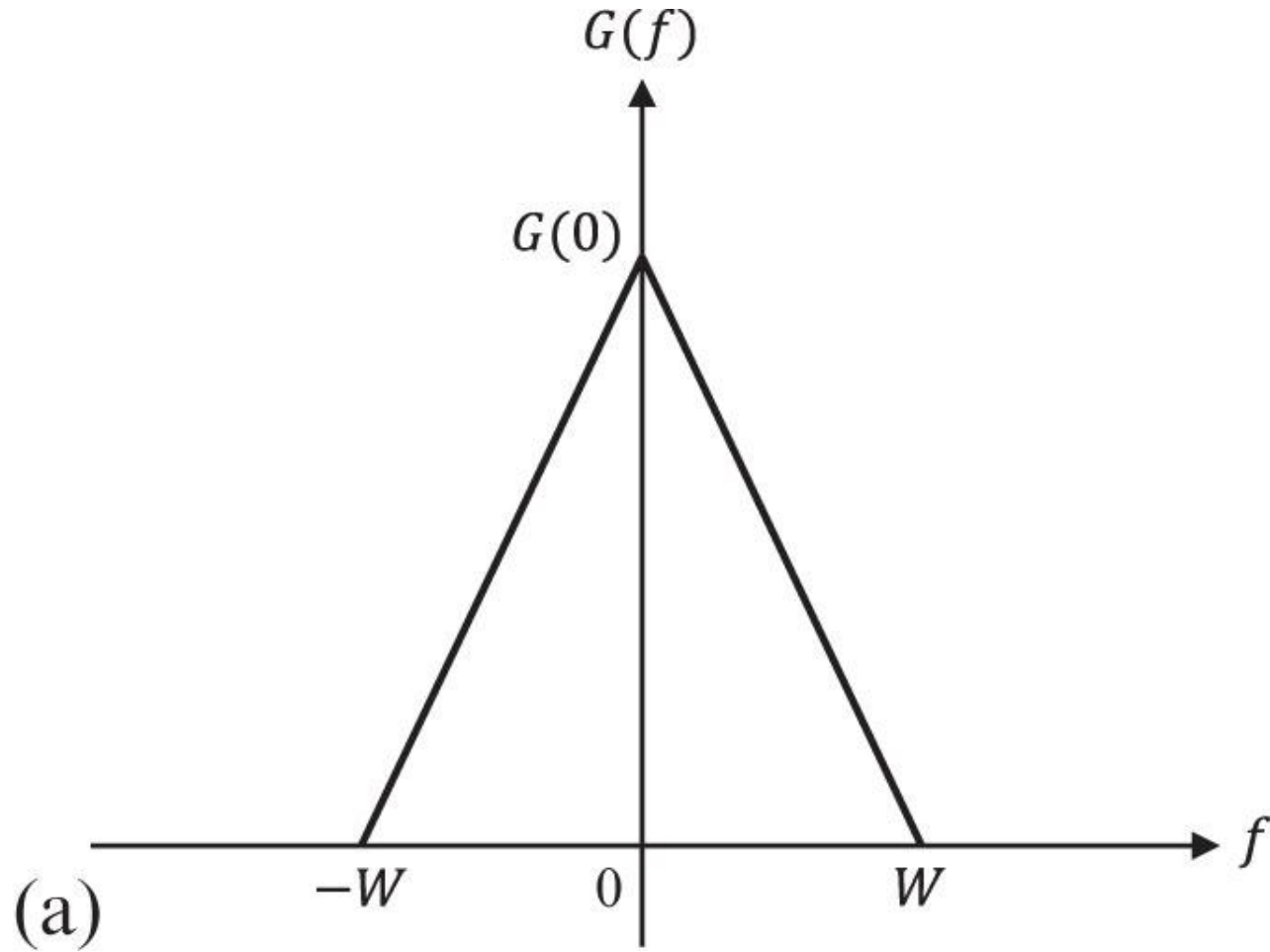**Figure 5.1g** Relationship among sample space, events, and probability.

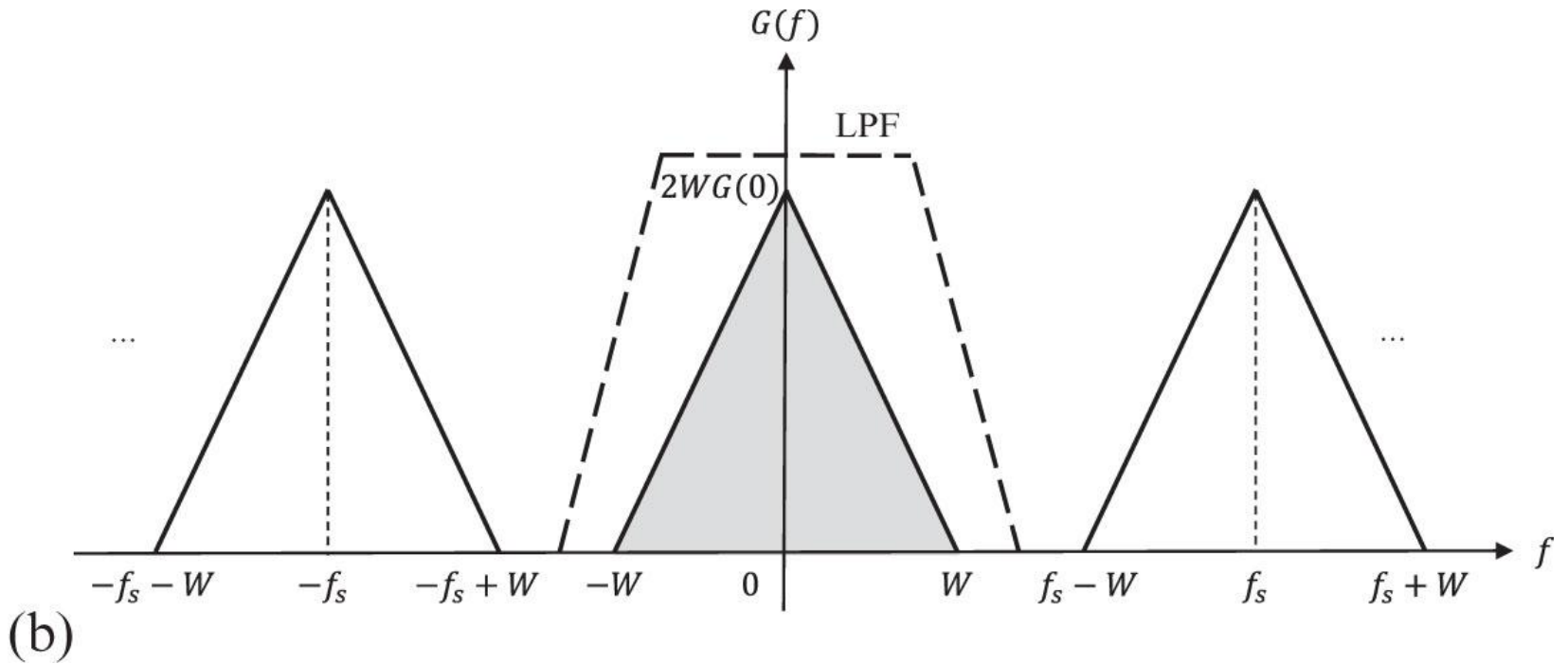**Figure 5.2a** Relationship among sample space, events, and probability.

Figure 5.2b Relationship among sample space, events, and probability.
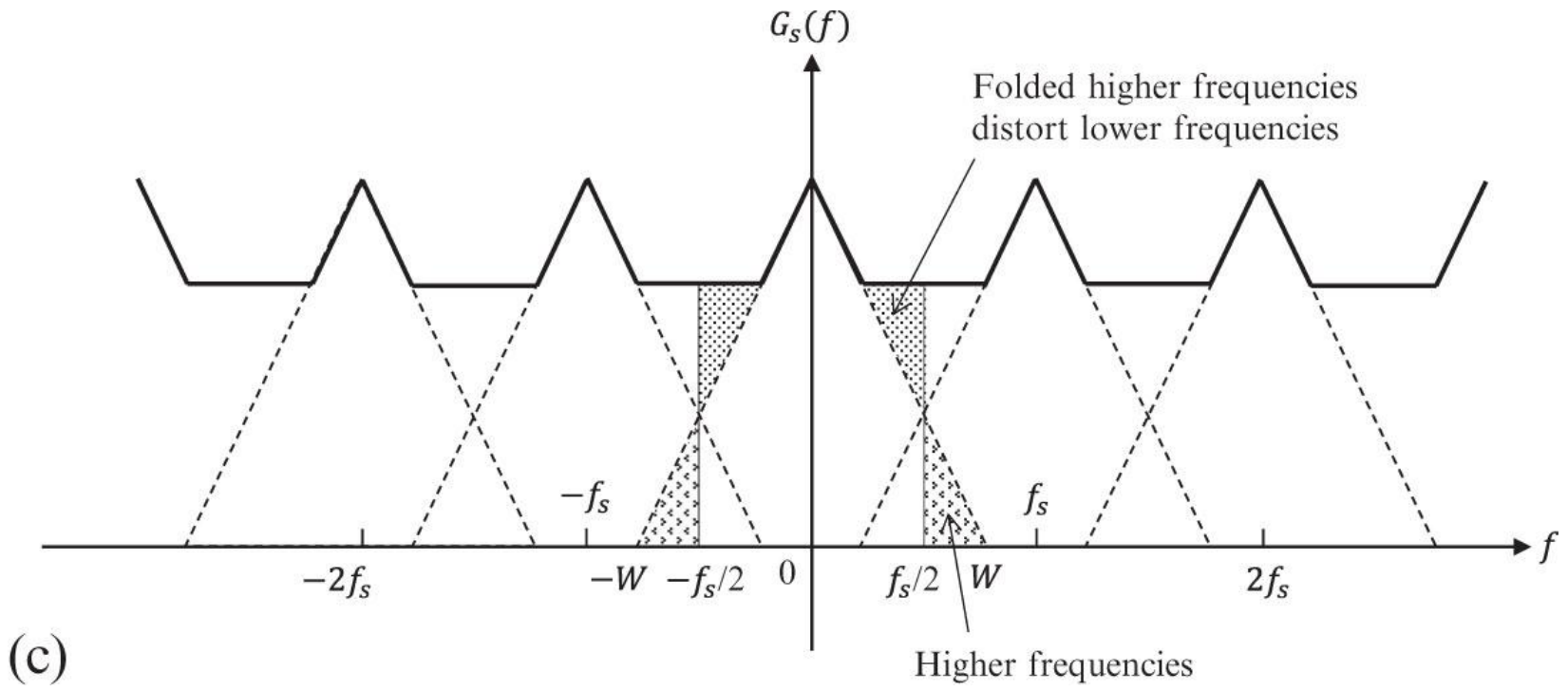
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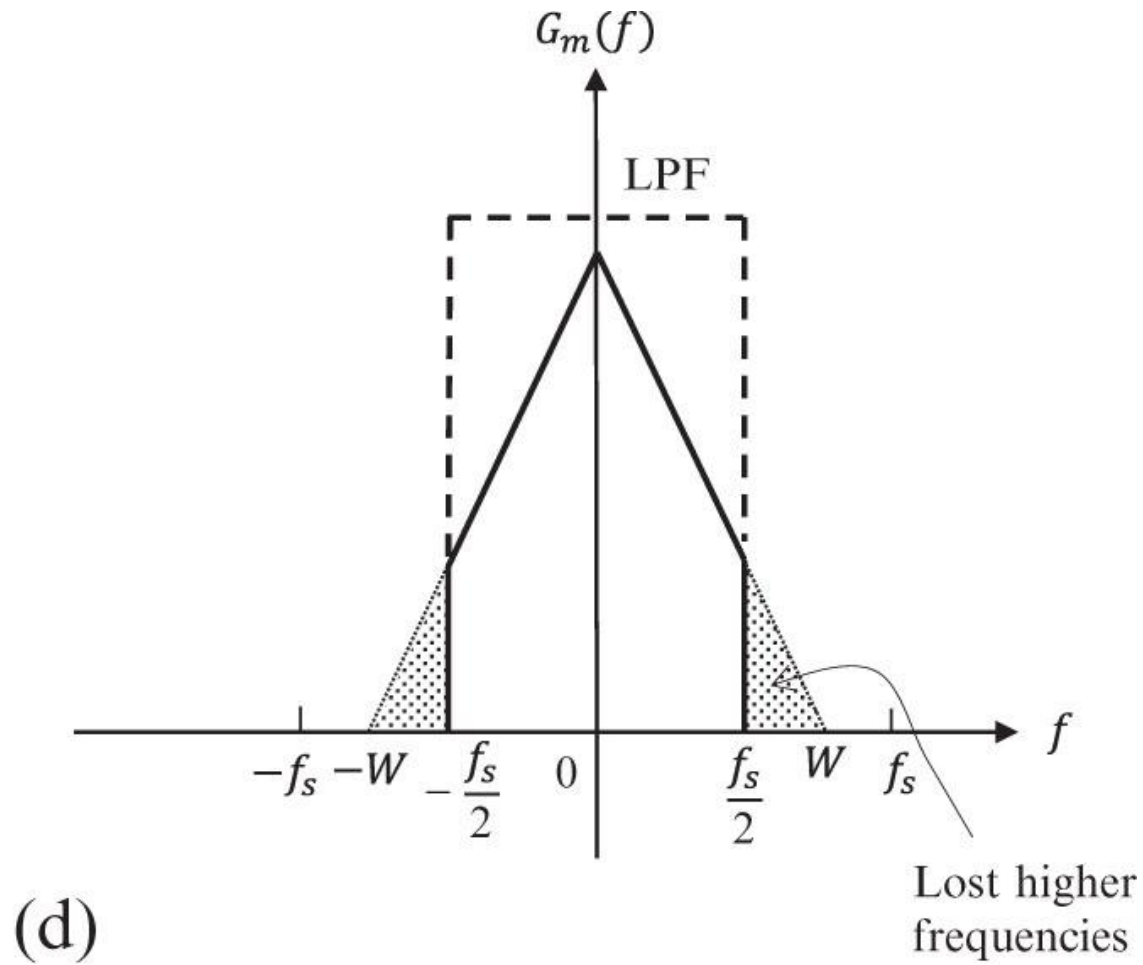**Figure 5.2c** Relationship among sample space, events, and probability.

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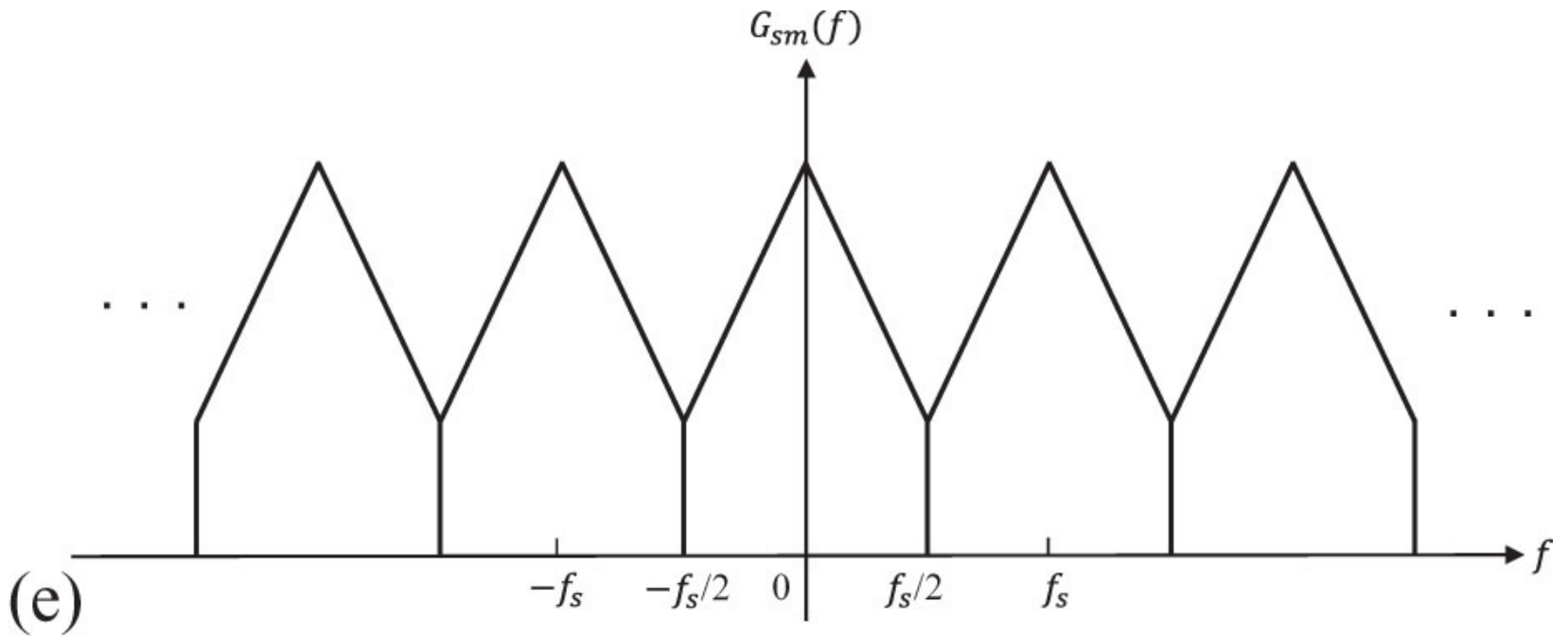**Figure 5.2d** Relationship among sample space, events, and probability.

Figure 5.2e Relationship among sample space, events, and probability.
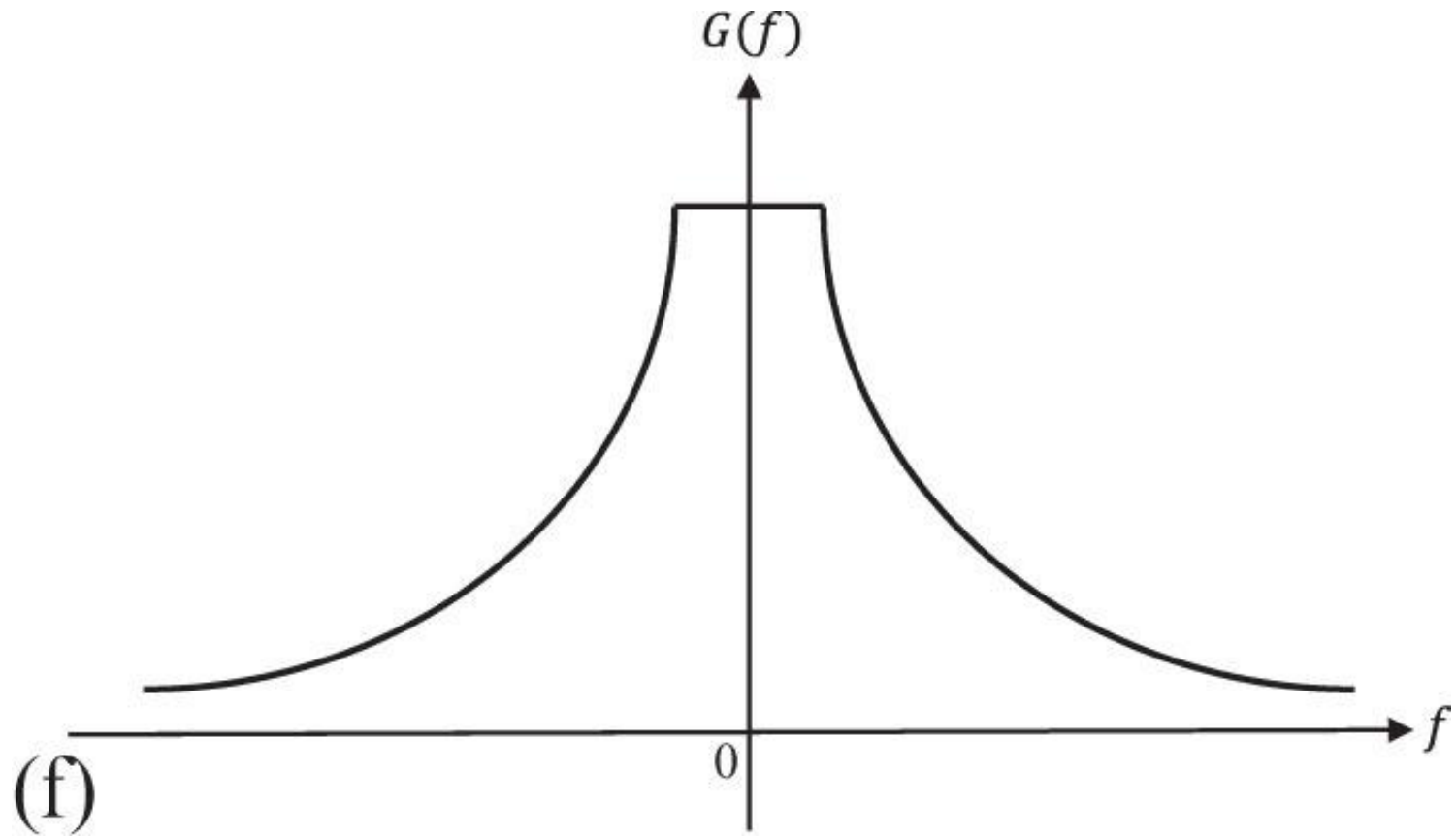
13

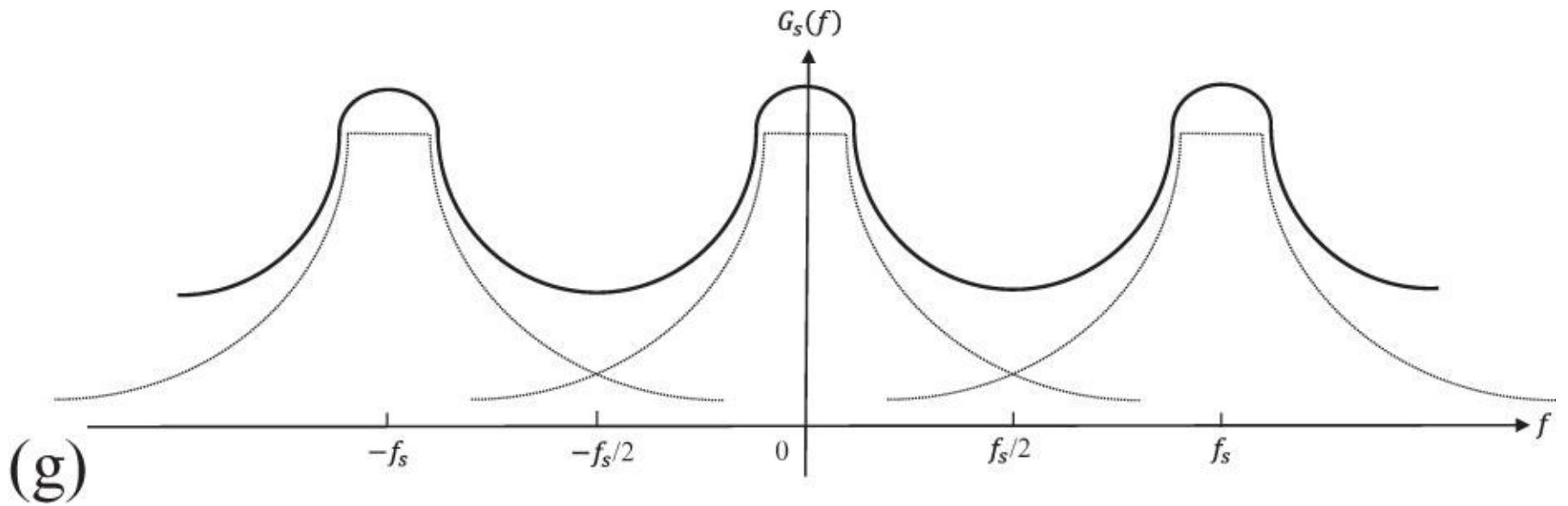**Figure 5.2f** Relationship among sample space, events, and probability.

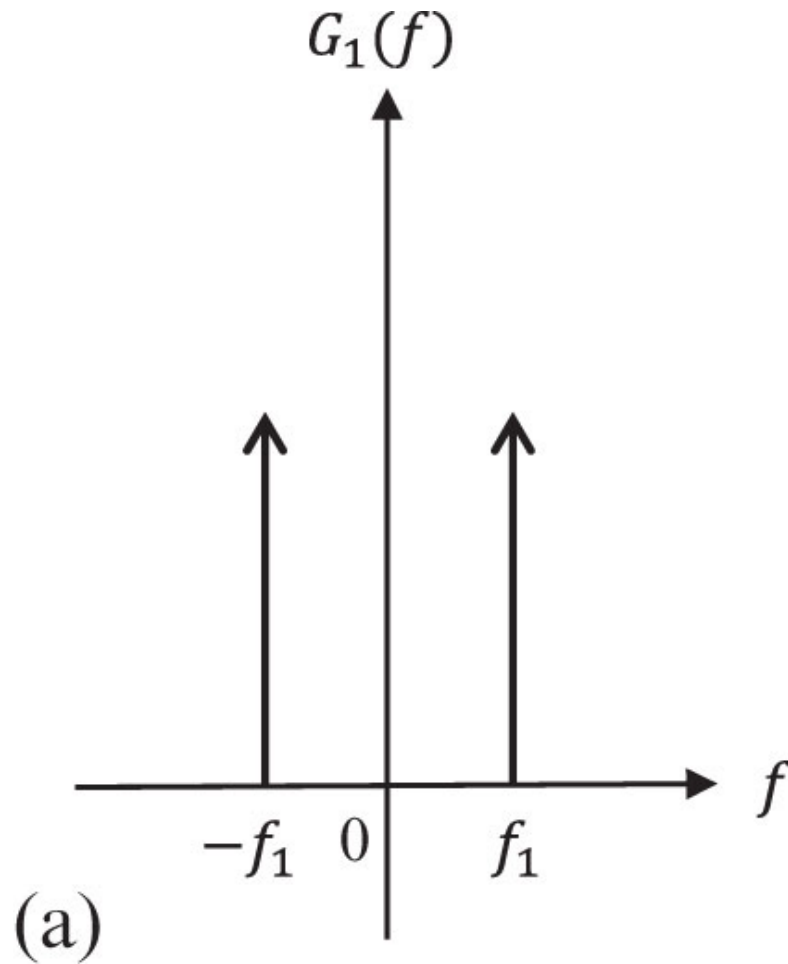**Figure 5.2g** Relationship among sample space, events, and probability.

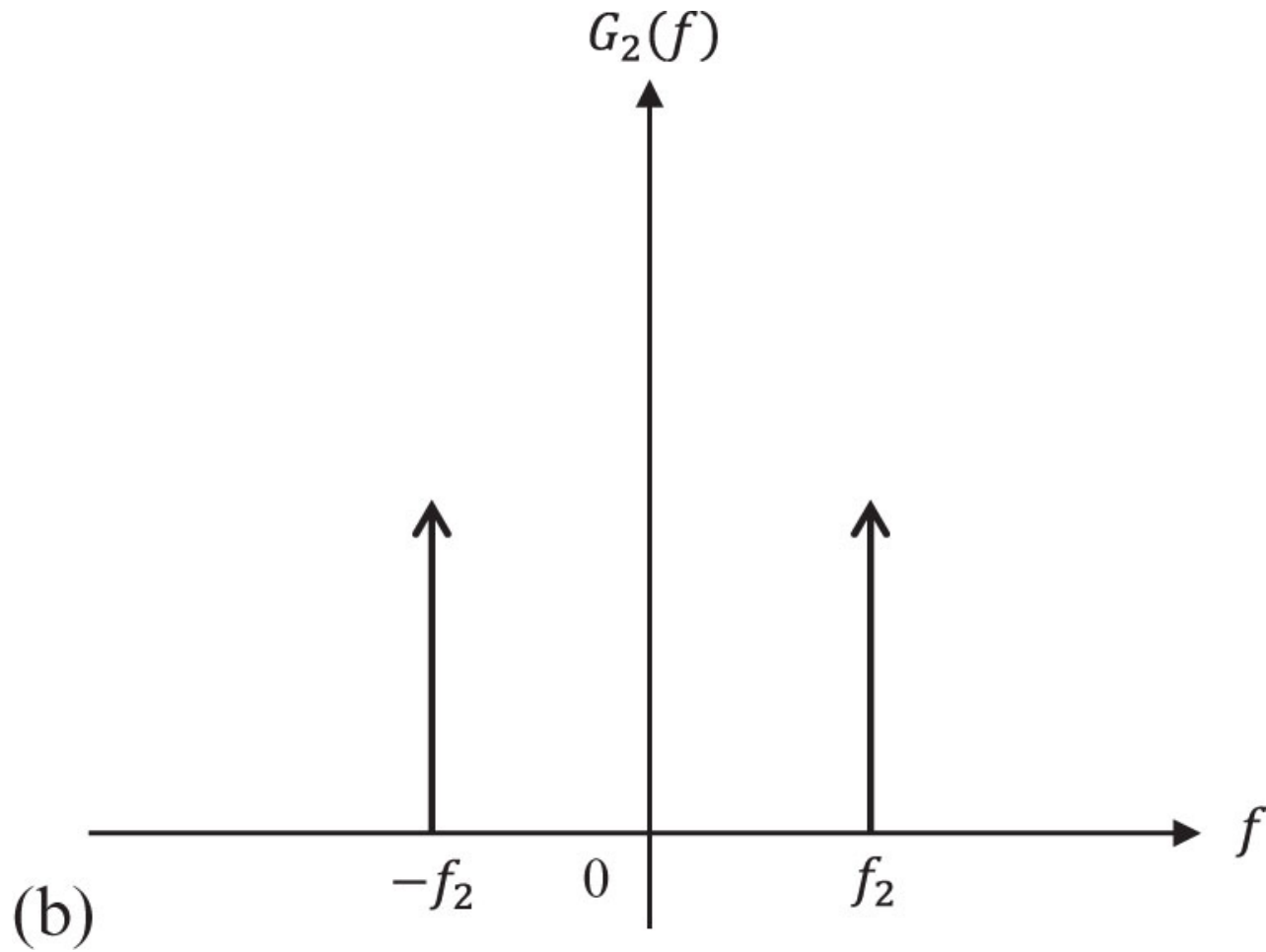**Figure 5.3a** Relationship among sample space, events, and probability.

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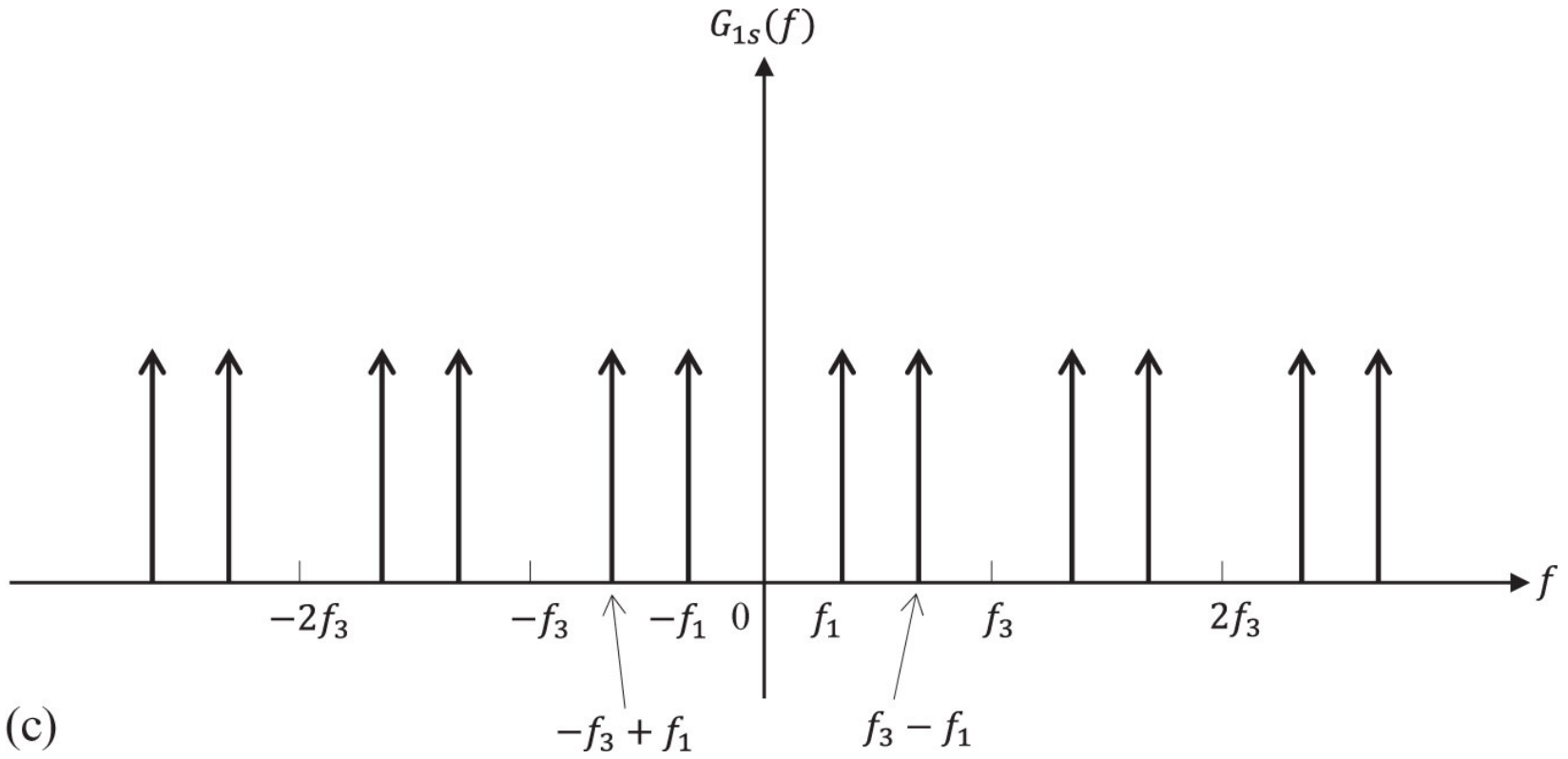**Figure 5.3b** Relationship among sample space, events, and probability.

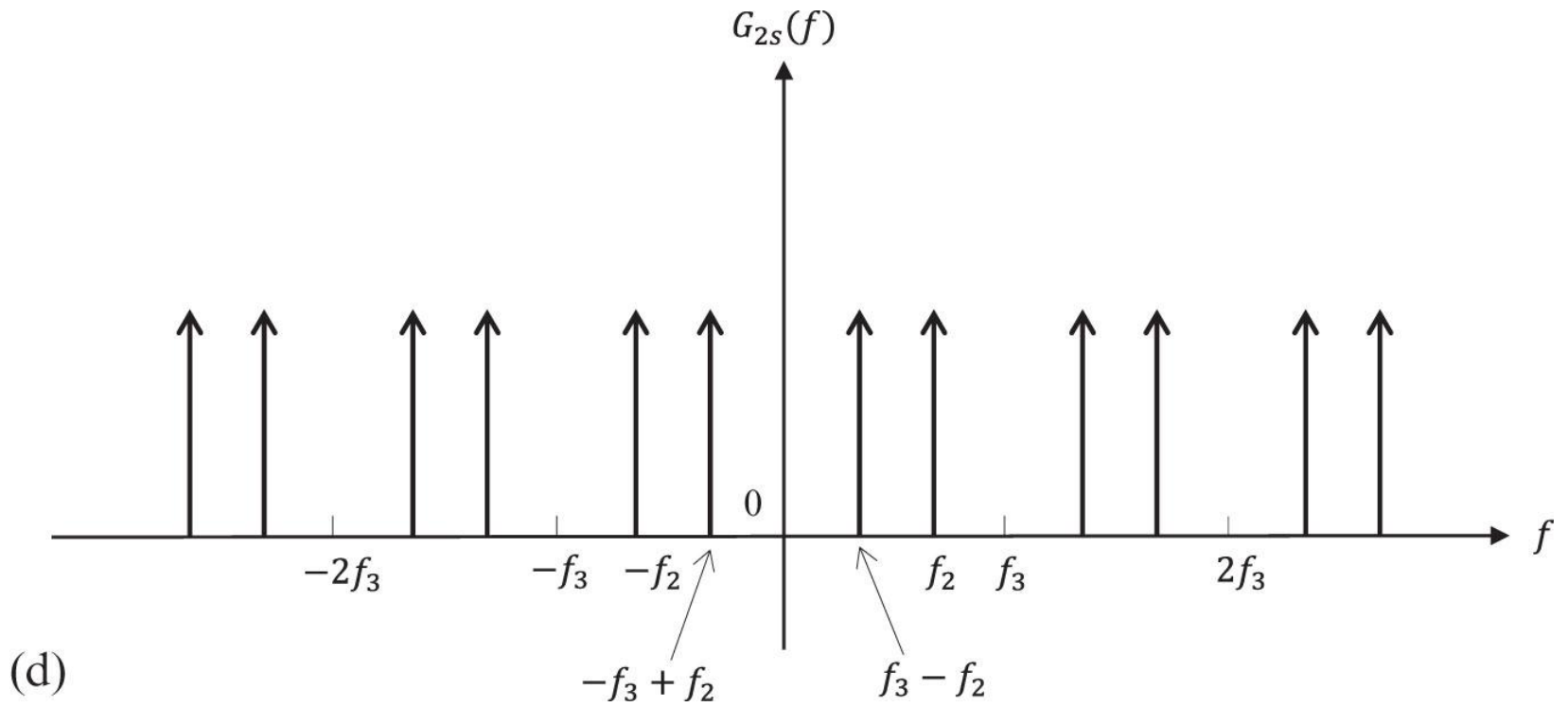**Figure 5.3c** Relationship among sample space, events, and probability.

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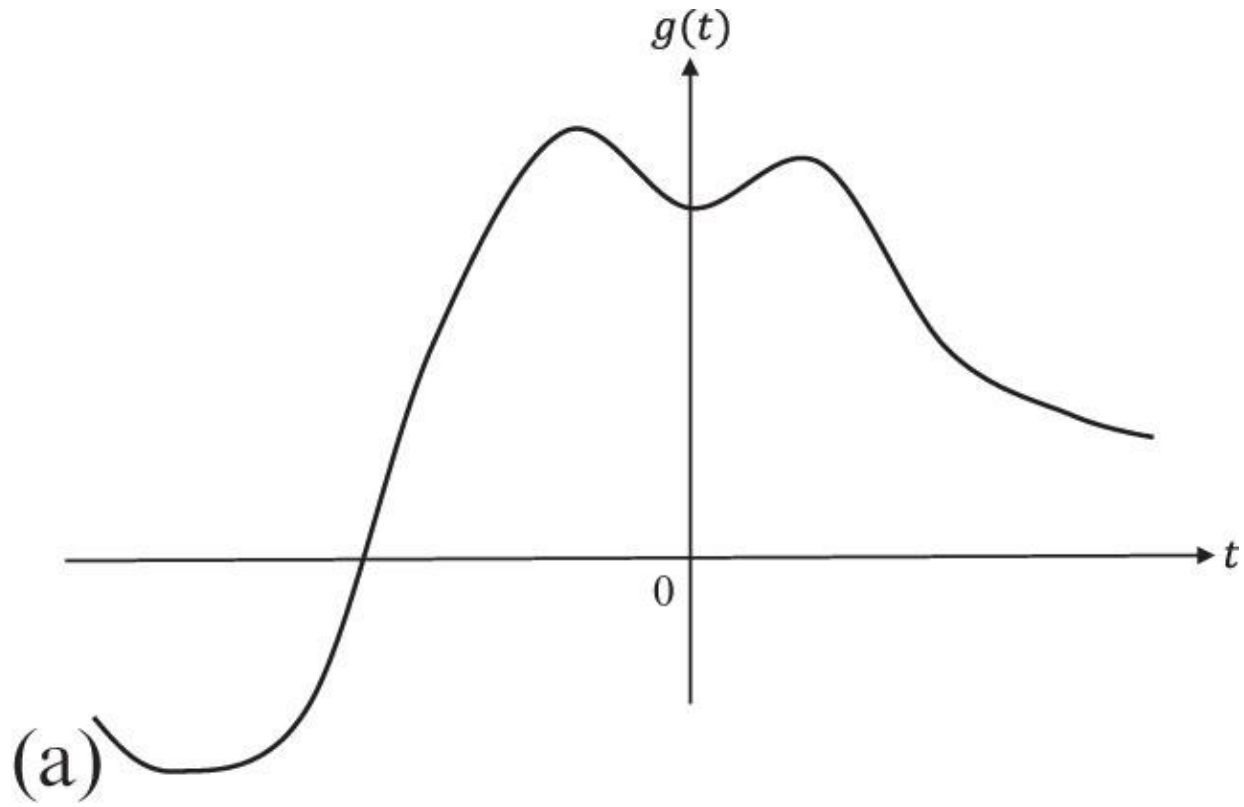**Figure 5.3d** Relationship among sample space, events, and probability.

Figure 5.4a Relationship among sample space, events, and probability.
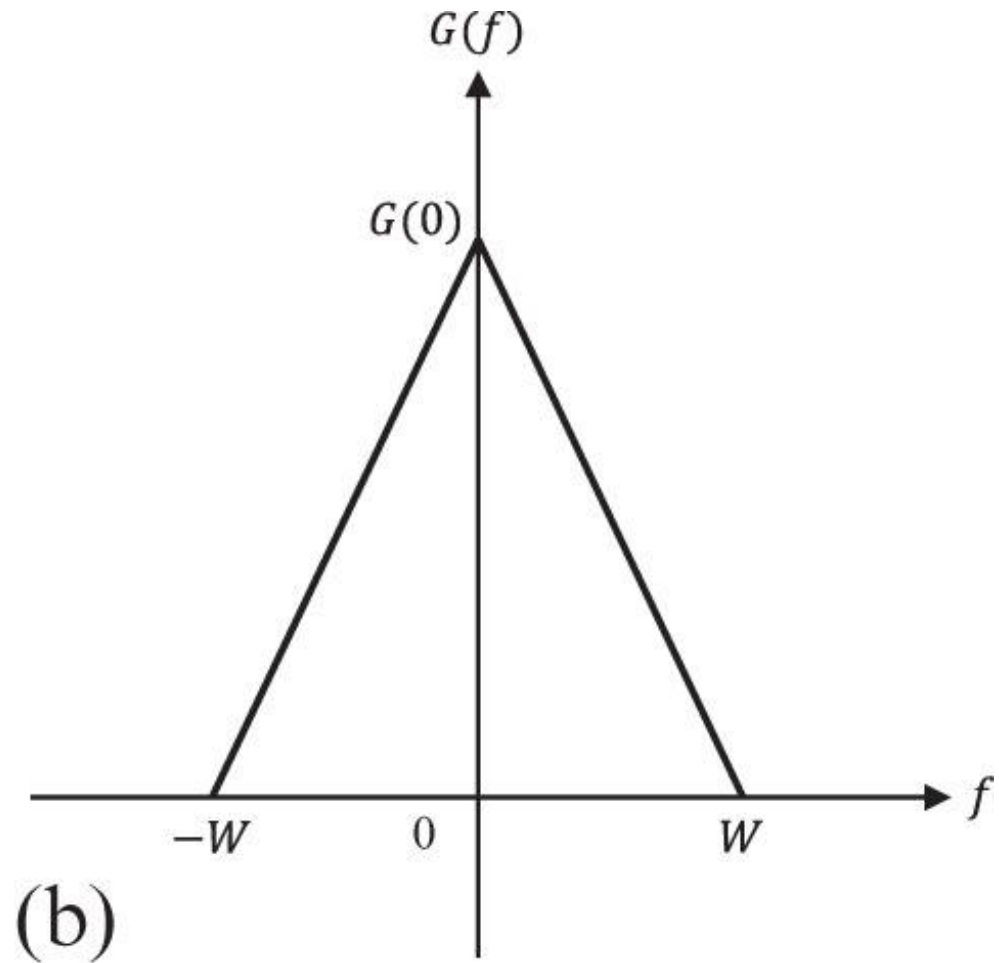
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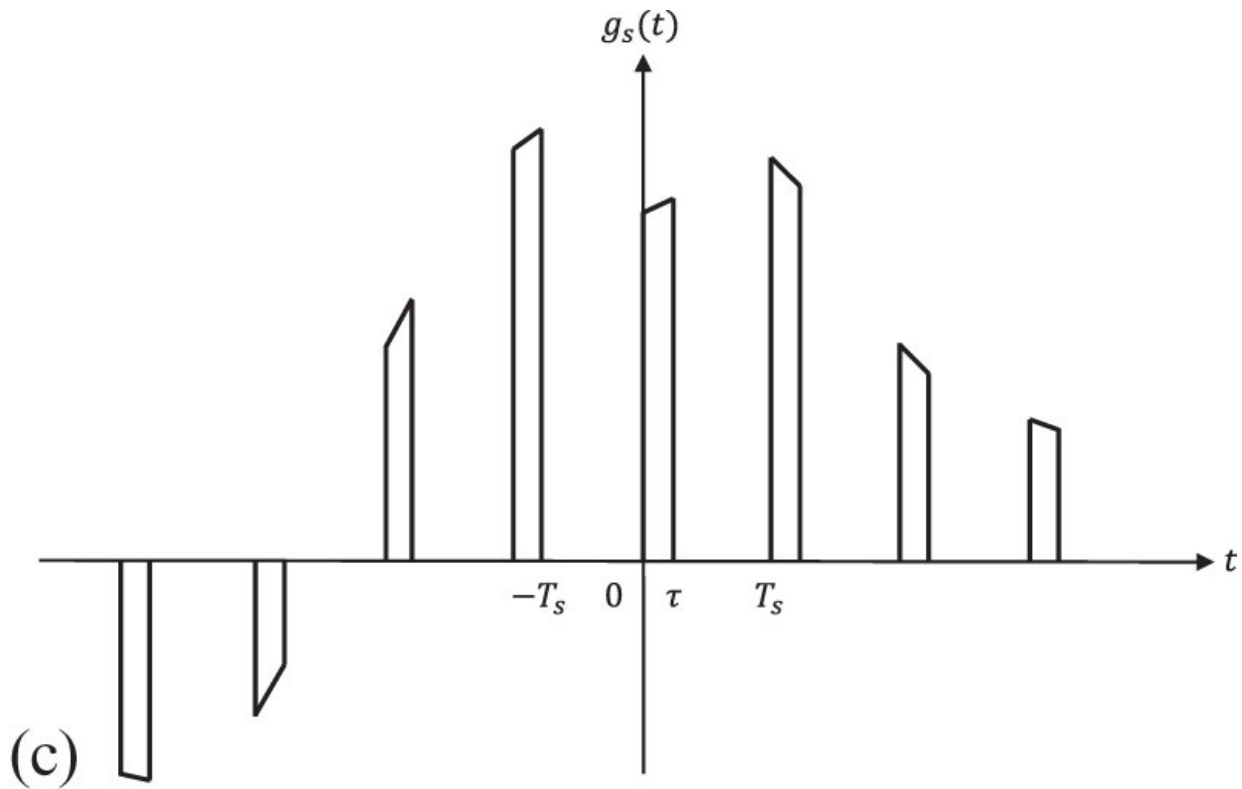**Figure 5.4b** Relationship among sample space, events, and probability.

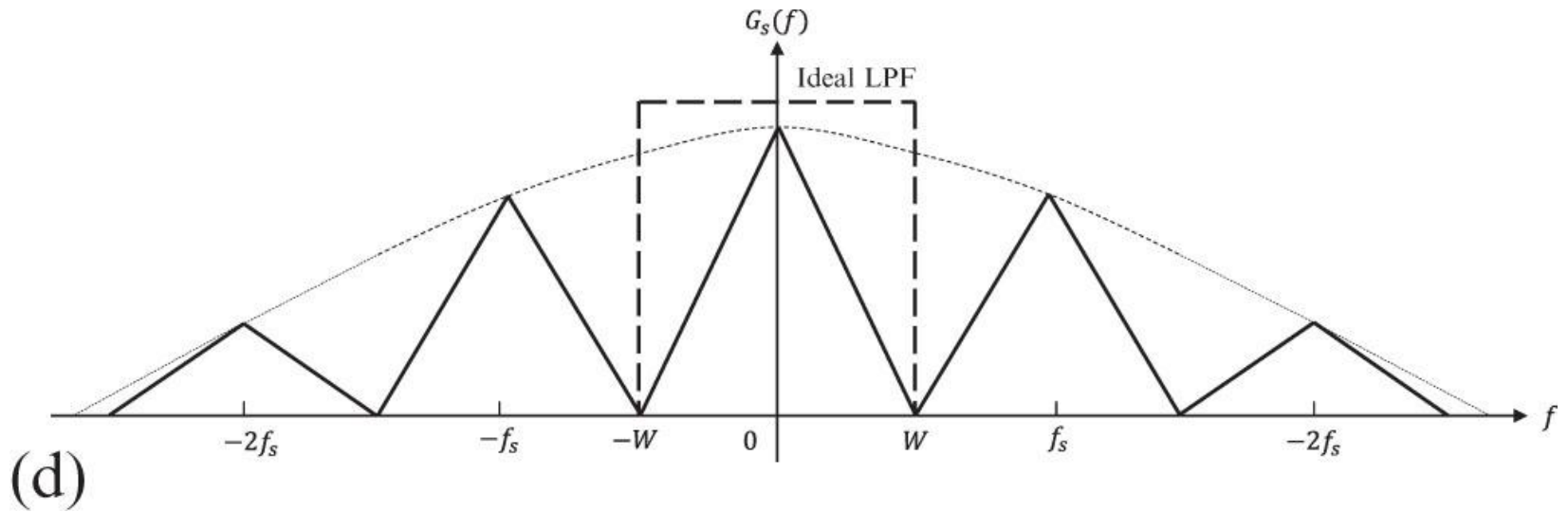**Figure 5.4c** Relationship among sample space, events, and probability.

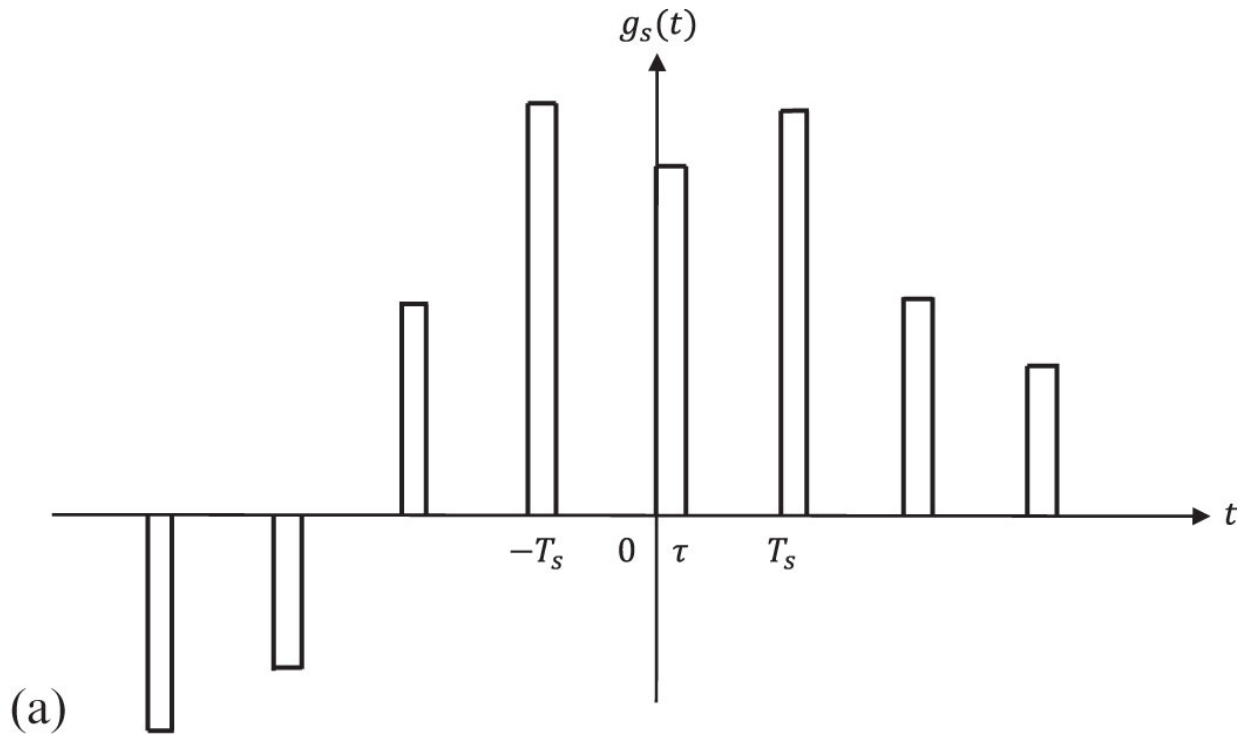**Figure 5.4d** Relationship among sample space, events, and probability.

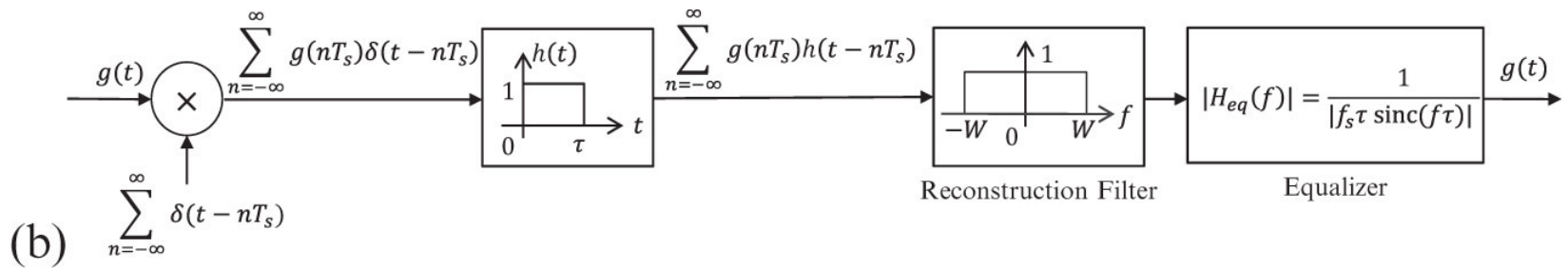**Figure 5.5a** Relationship among sample space, events, and probability.

(b)

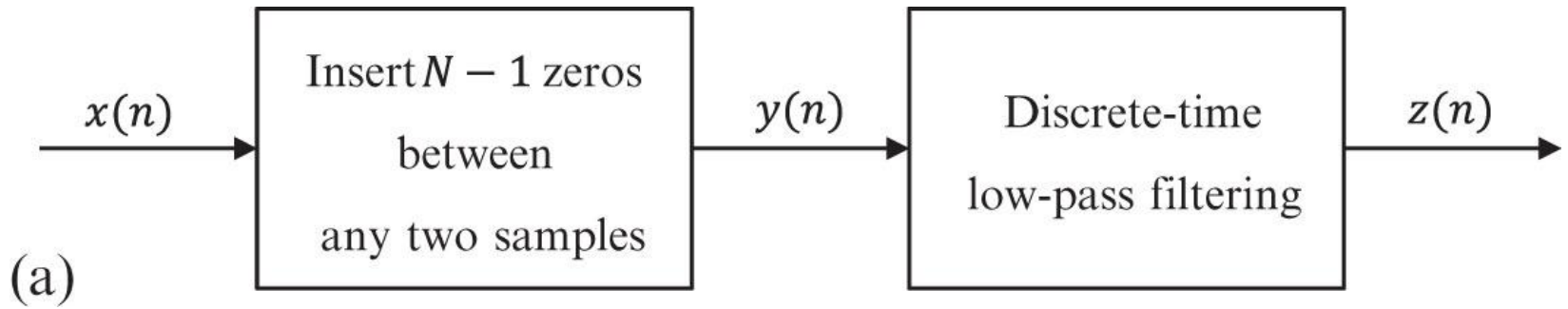**Figure 5.5b** Relationship among sample space, events, and probability.

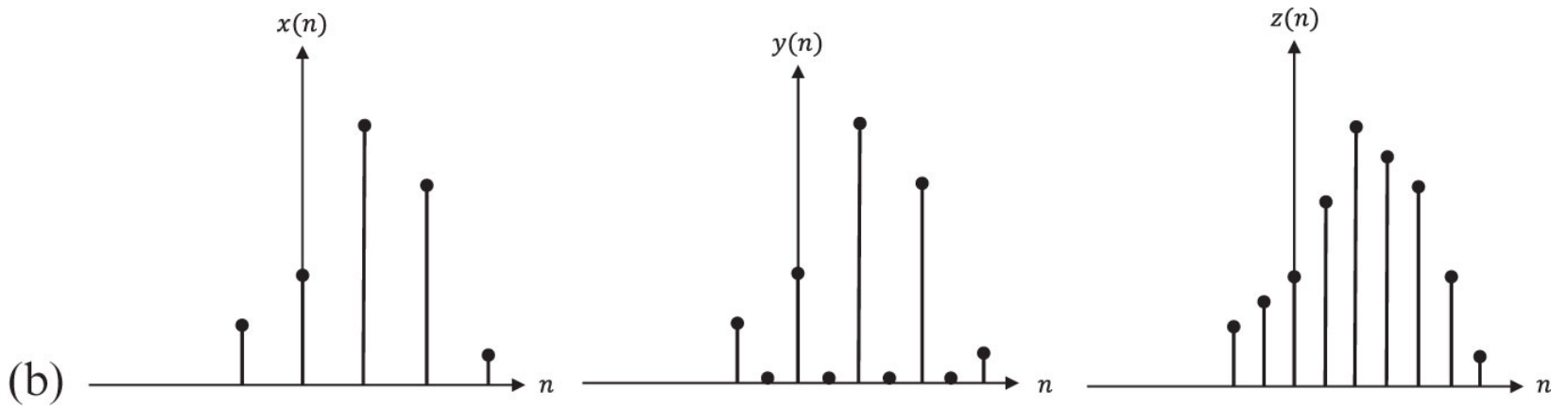**Figure 5.6a** Relationship among sample space, events, and probability.

Figure 5.6b Relationship among sample space, events, and probability.

$G(f)$

$-f_c - W$ $-f_c$ $-f_c + W$ 0 $f_c - W$ f_c $f_c + W$ f
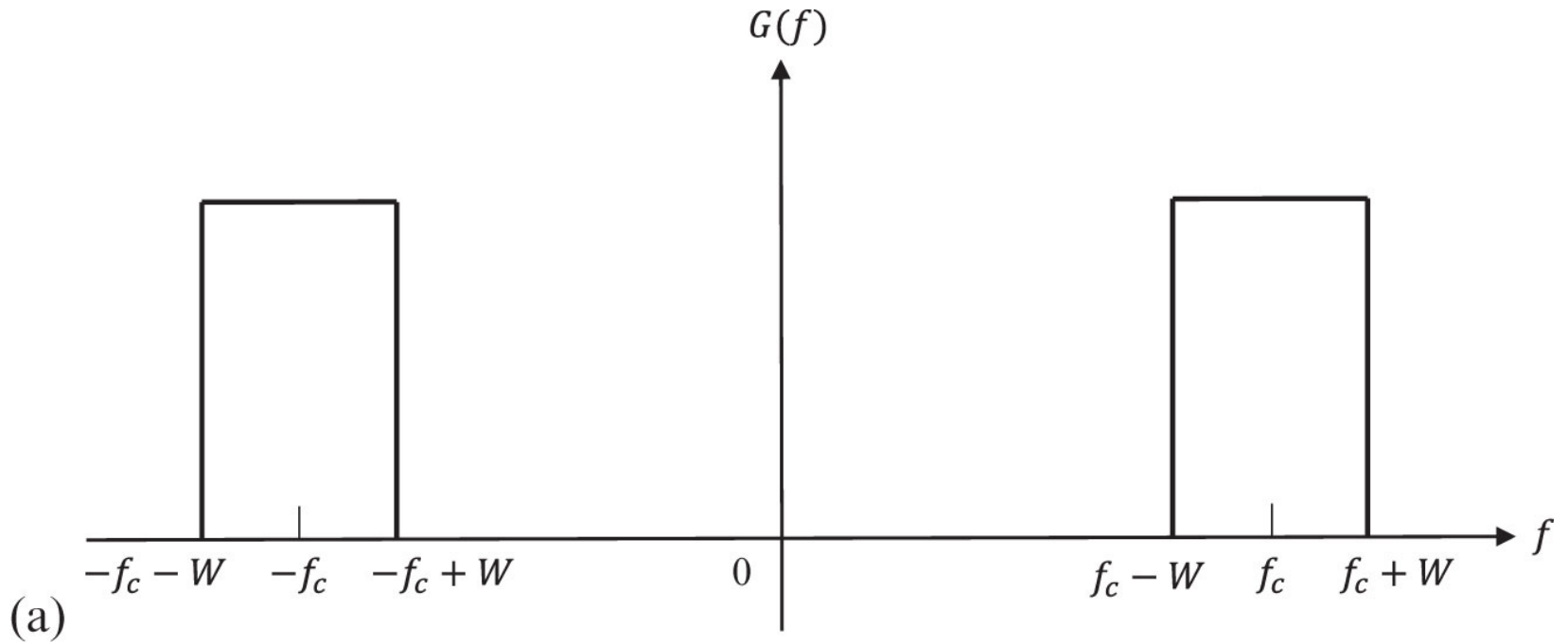
(a)

Figure 5.7a Relationship among sample space, events, and probability.
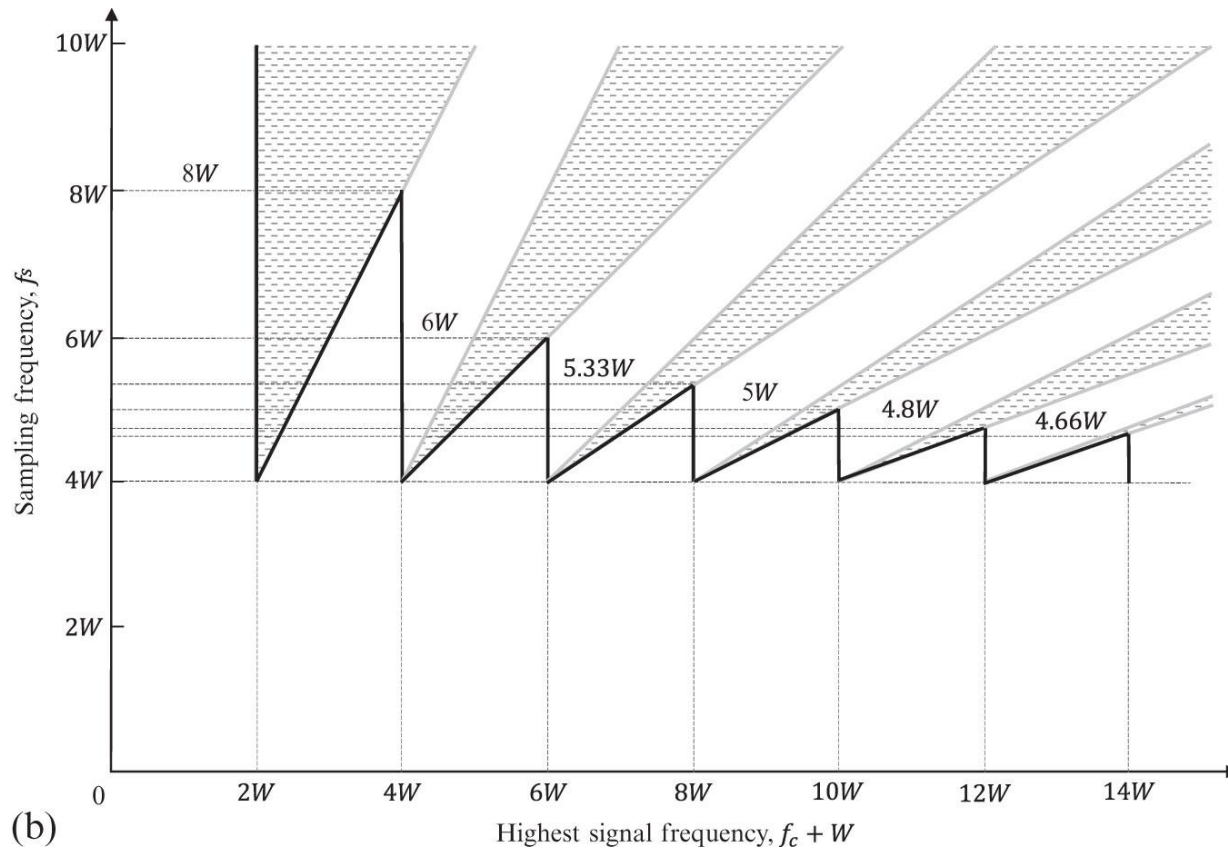
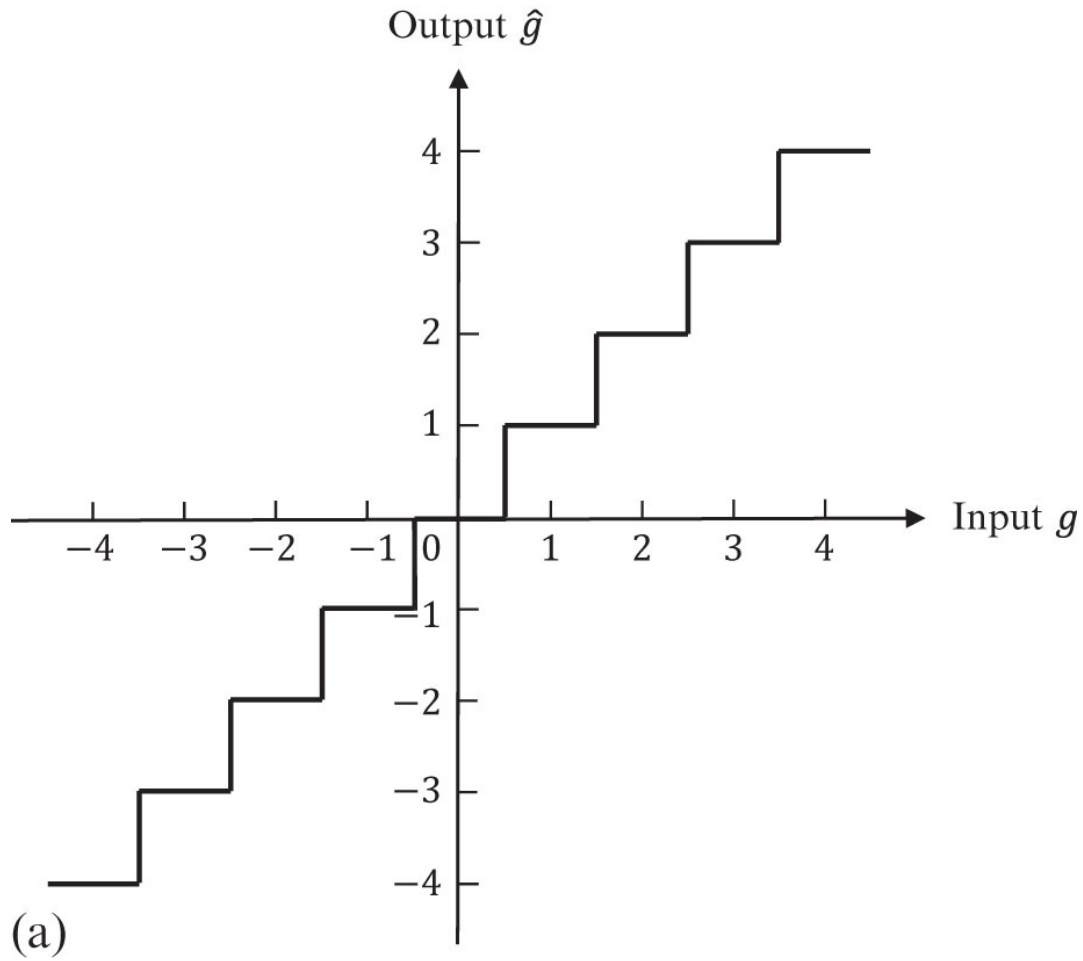**Figure 5.7b** Relationship among sample space, events, and probability.

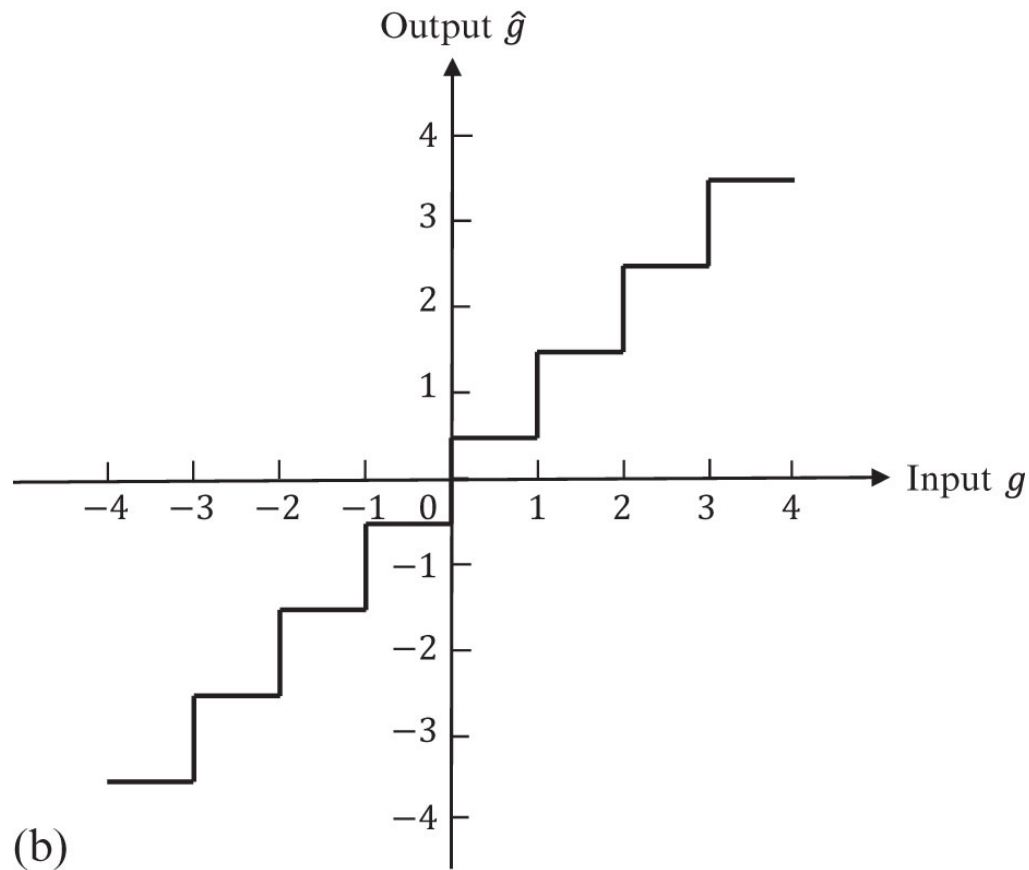**Figure 5.8a** Relationship among sample space, events, and probability.

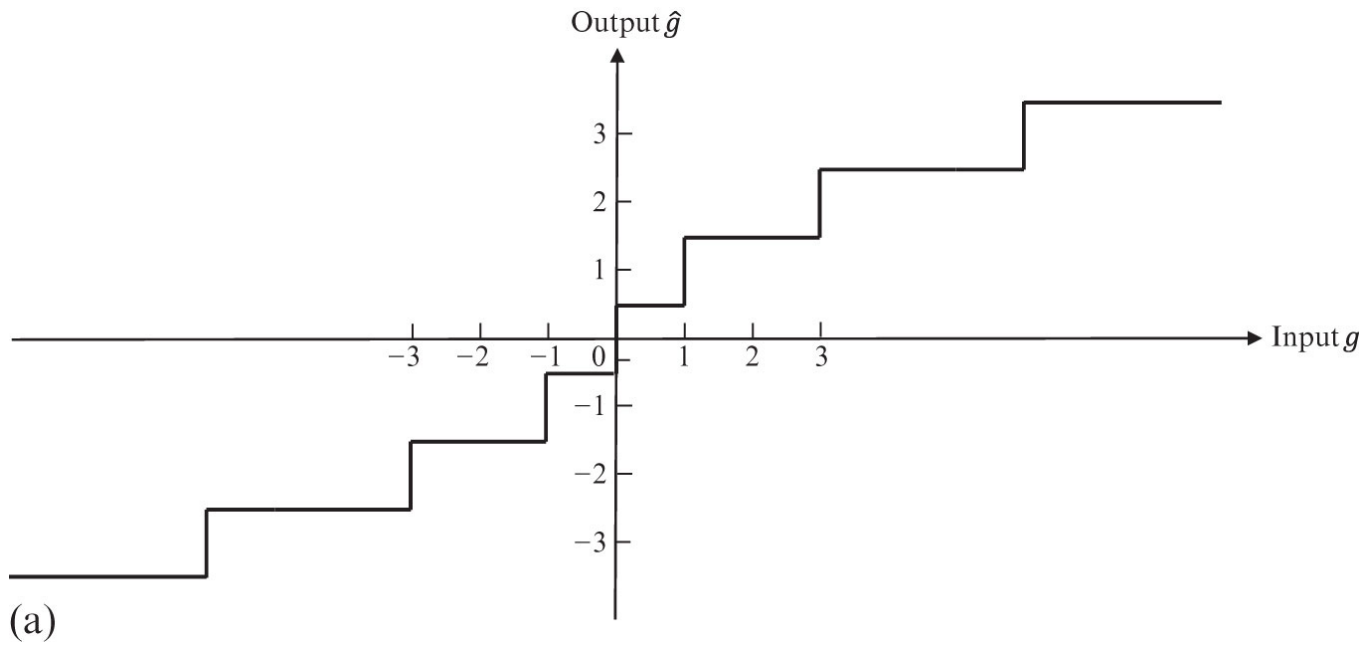**Figure 5.8b** Relationship among sample space, events, and probability.

(a)

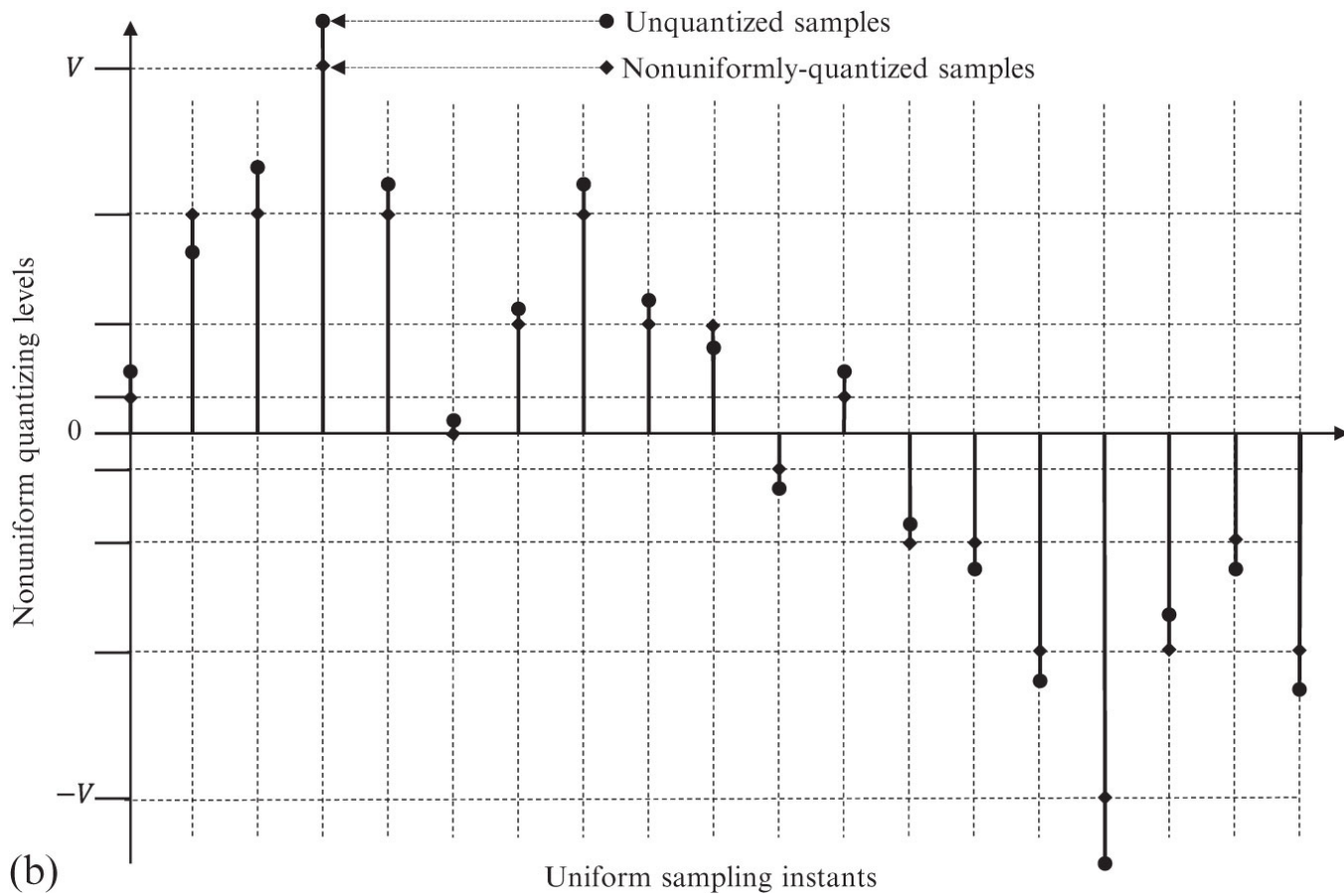**Figure 5.9a** Relationship among sample space, events, and probability.

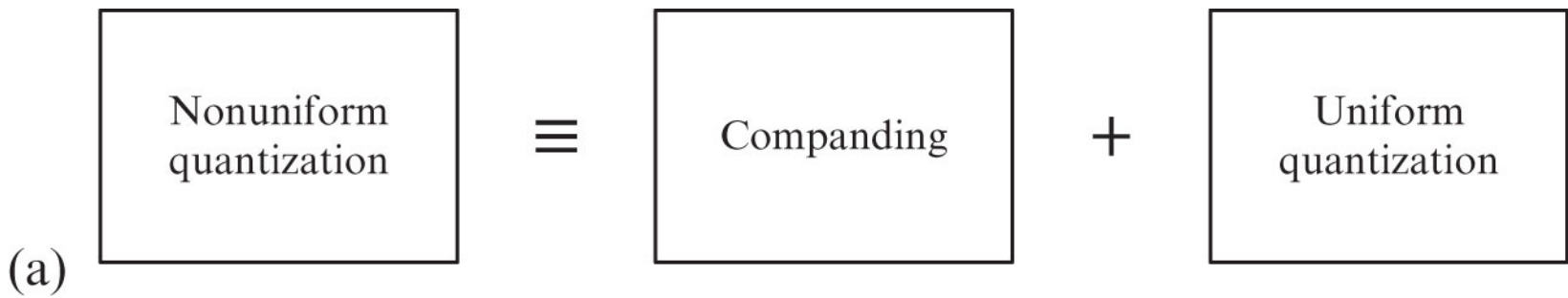**Figure 5.9b** Relationship among sample space, events, and probability.

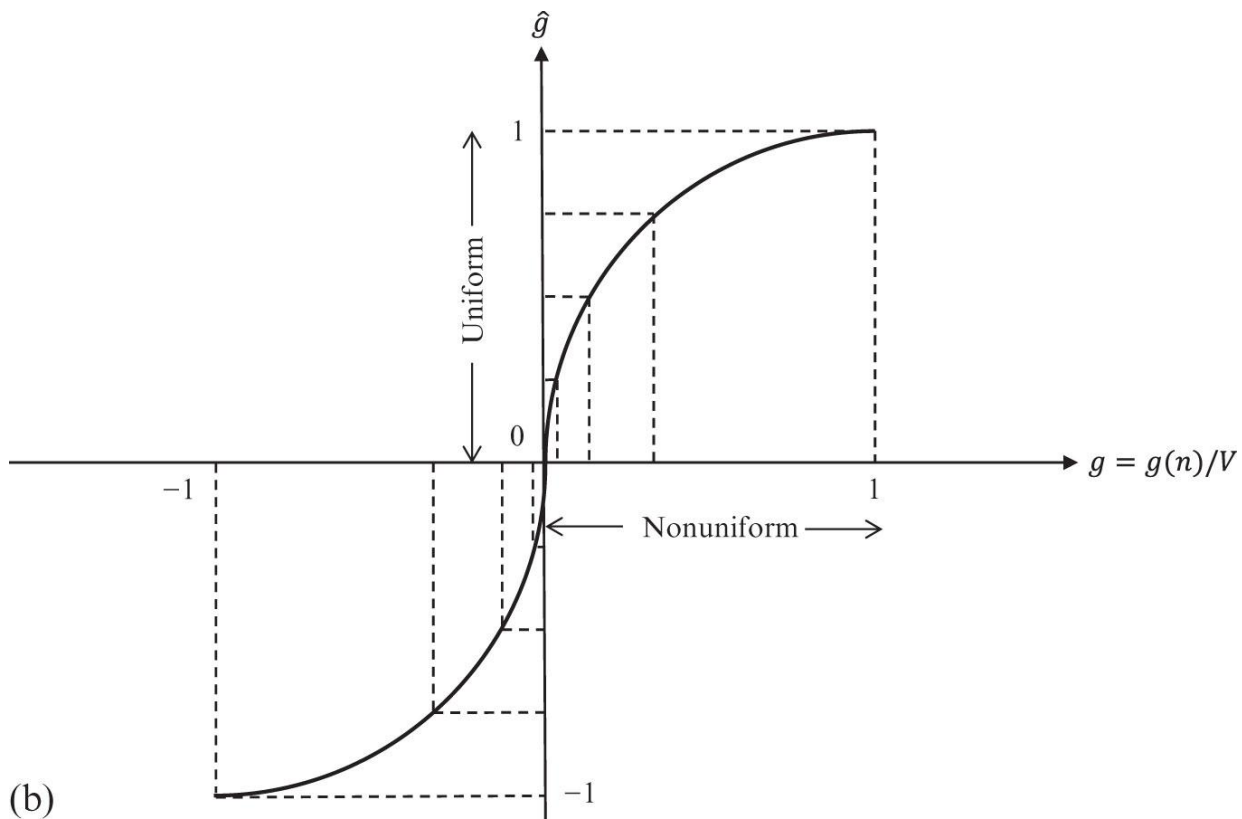**Figure 5.10a** Relationship among sample space, events, and probability.

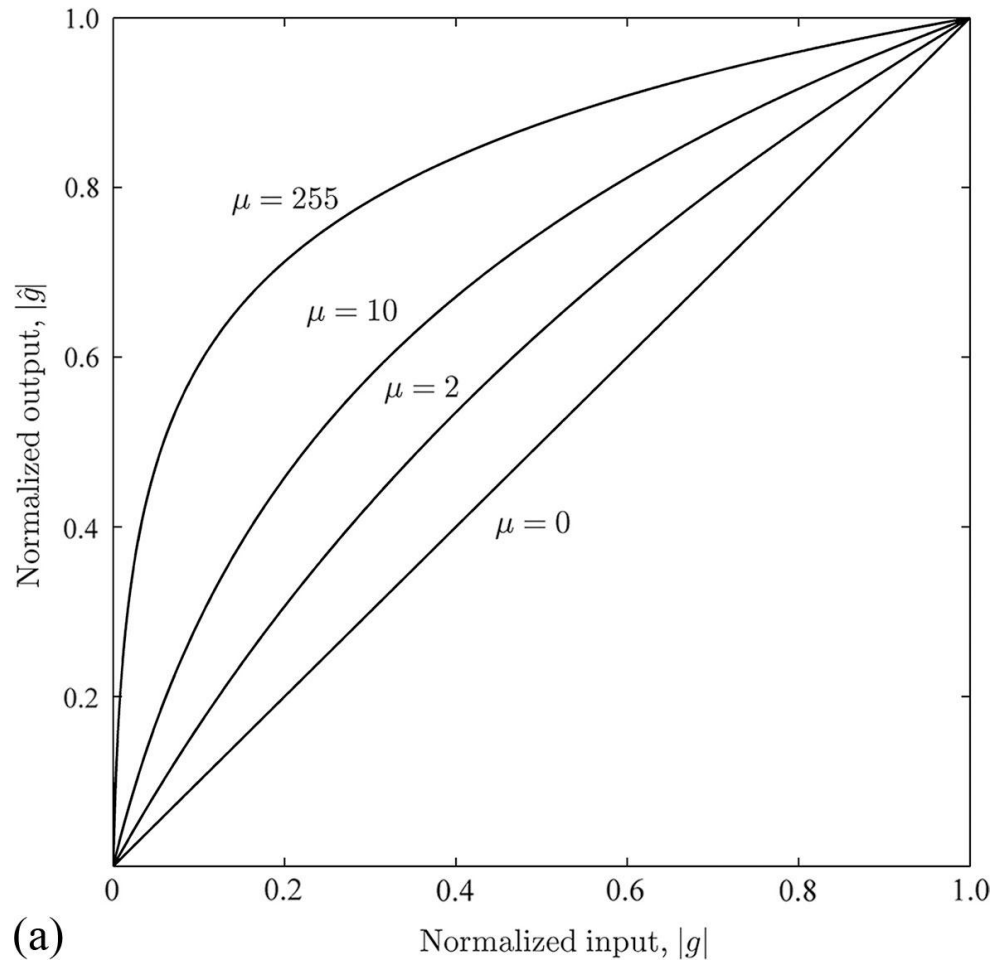**Figure 5.10b** Relationship among sample space, events, and probability.

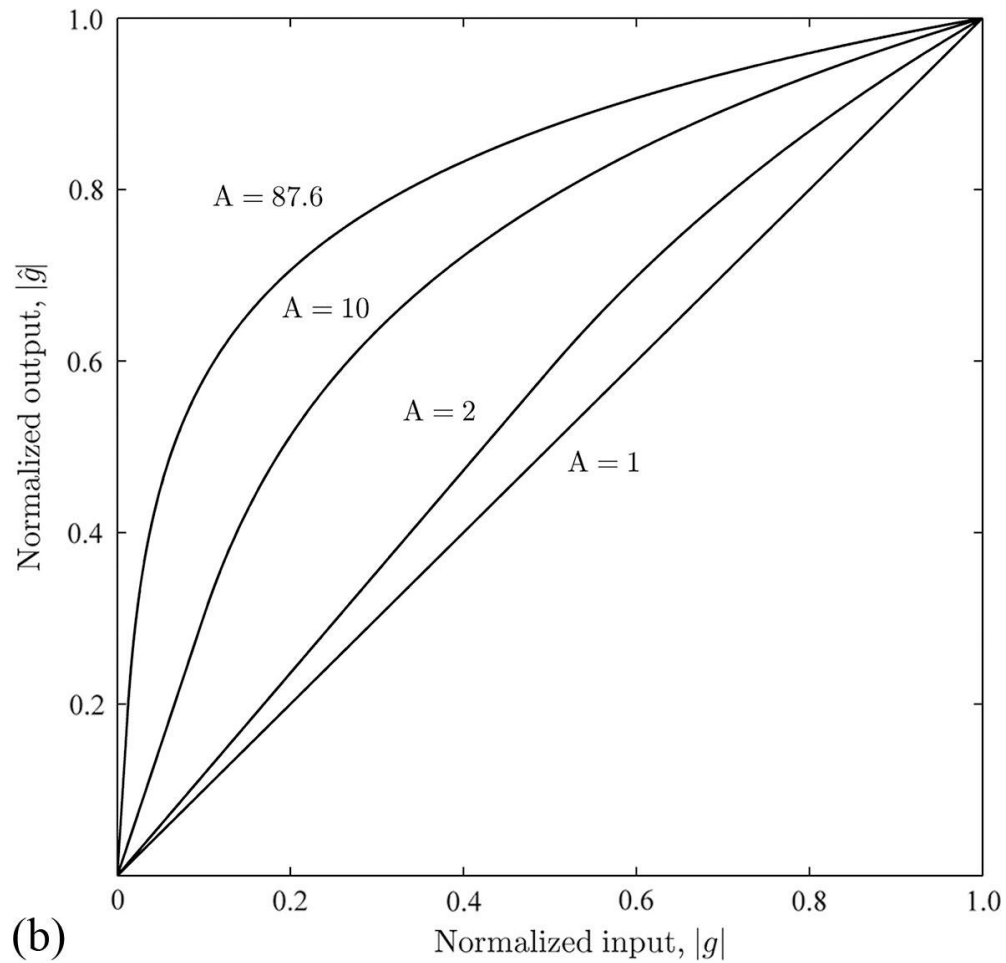**Figure 5.11a** Relationship among sample space, events, and probability.

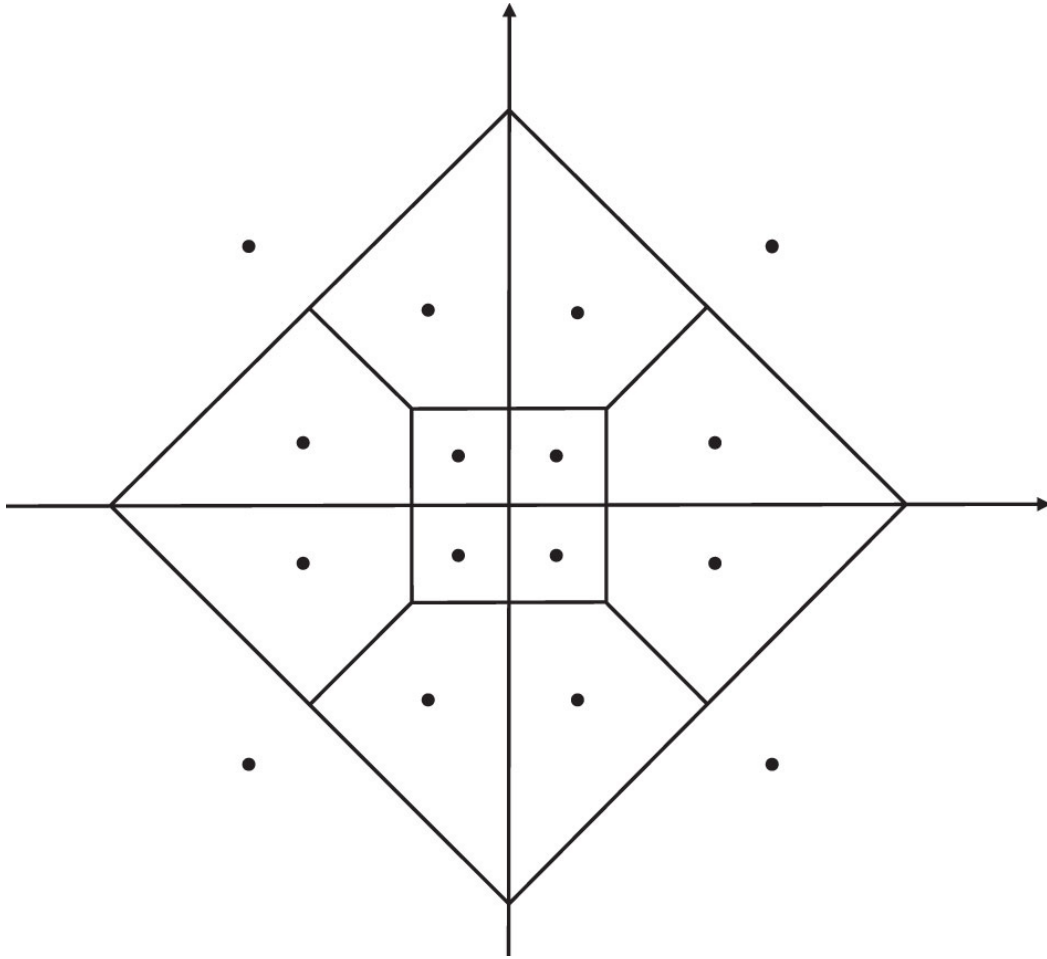**Figure 5.11b** Relationship among sample space, events, and probability.

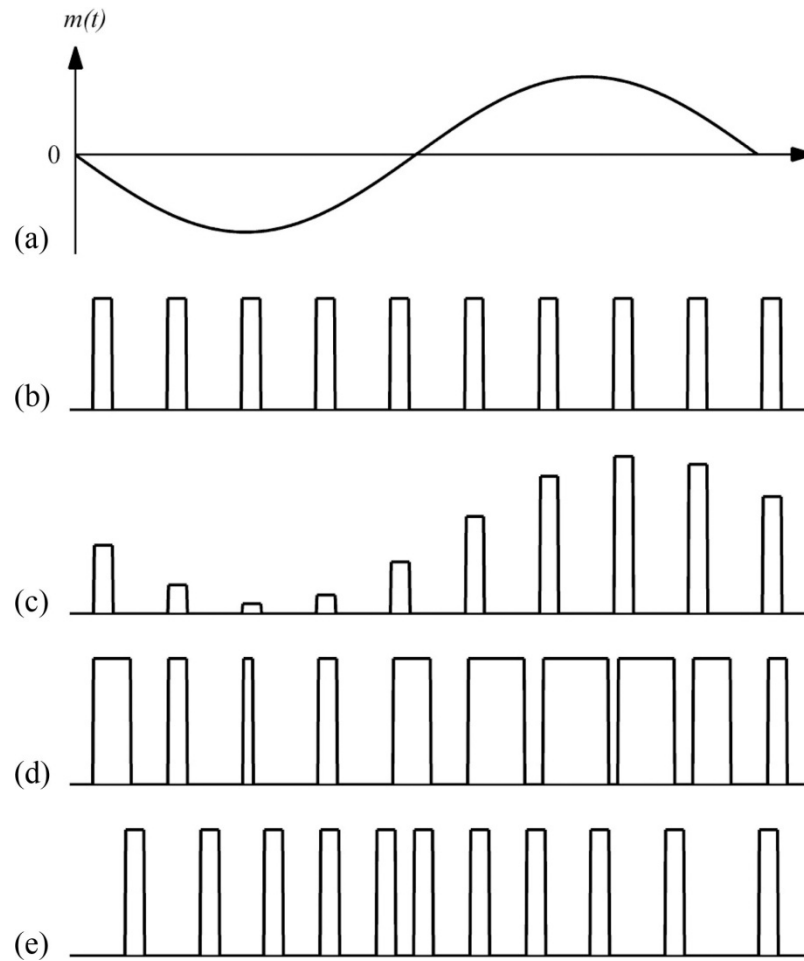**Figure 5.12** Relationship among sample space, events, and probability.

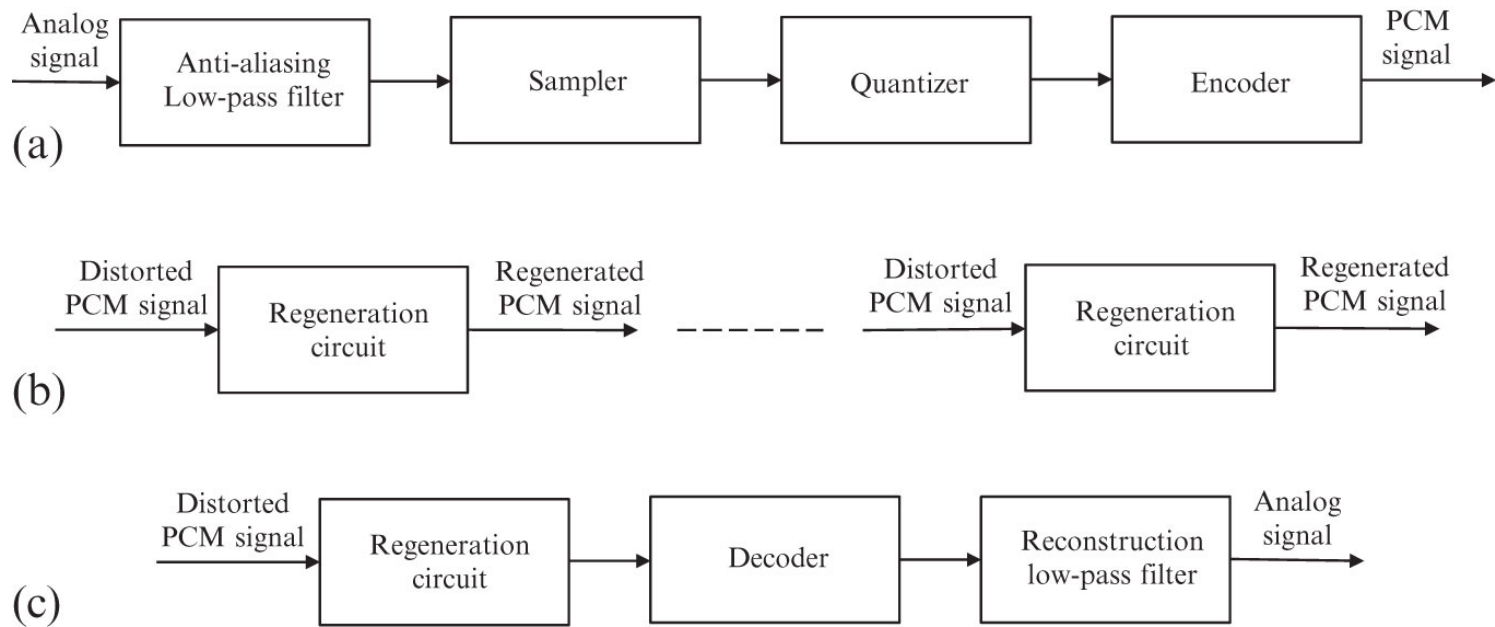**Figure 5.13** Relationship among sample space, events, and probability.

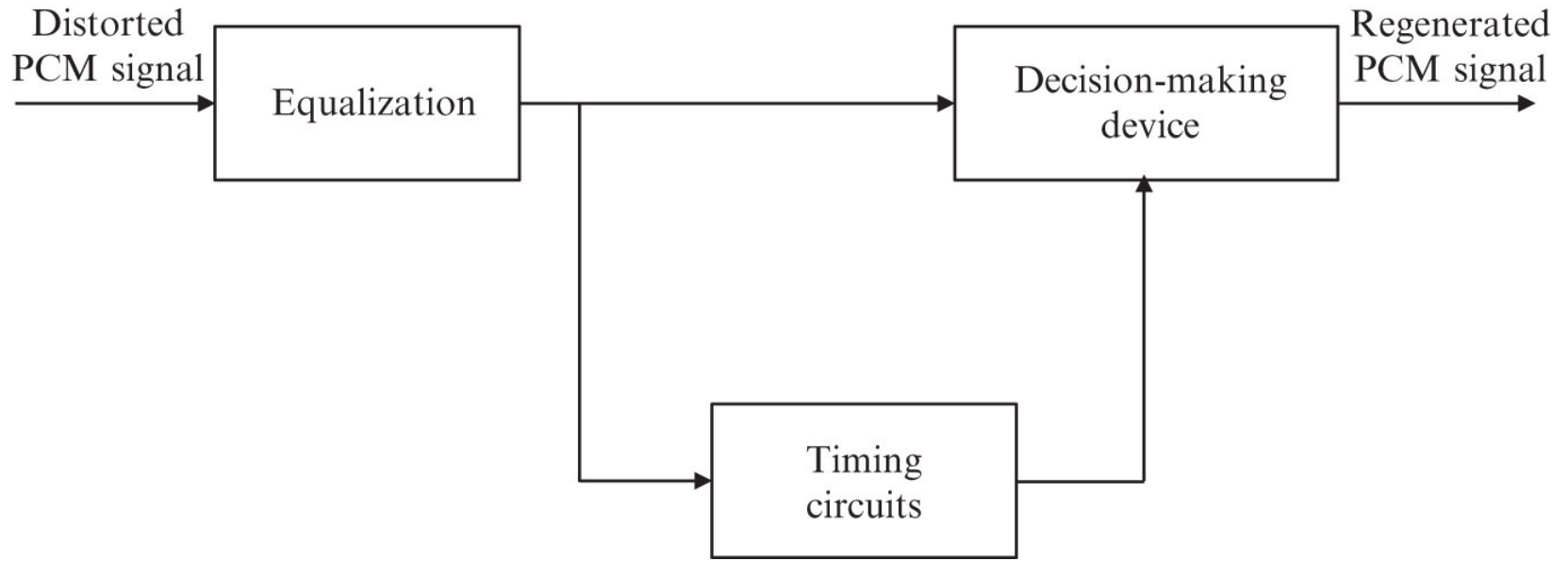**Figure 5.14** Relationship among sample space, events, and probability.

Figure 5.15 Relationship among sample space, events, and probability.
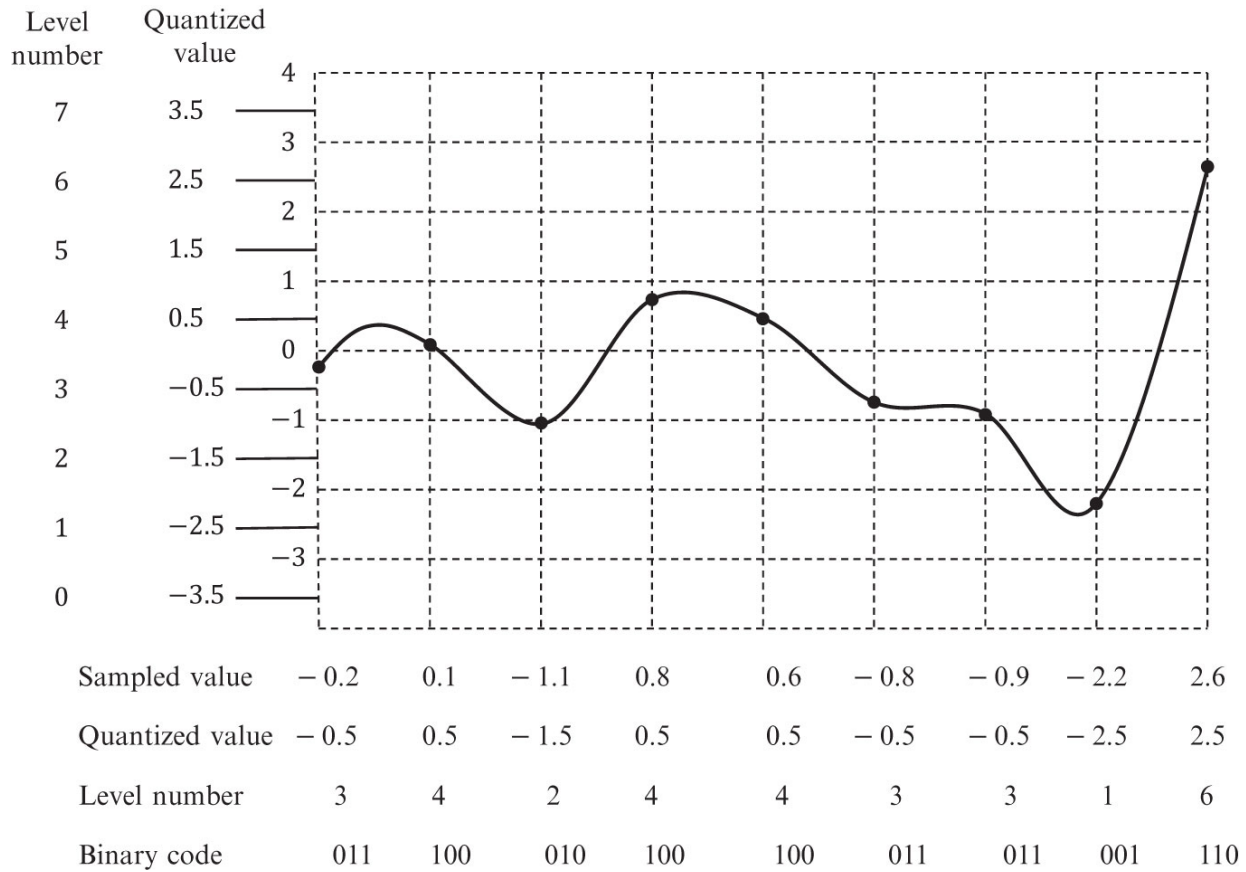
Figure 5.16 Relationship among sample space, events, and probability.

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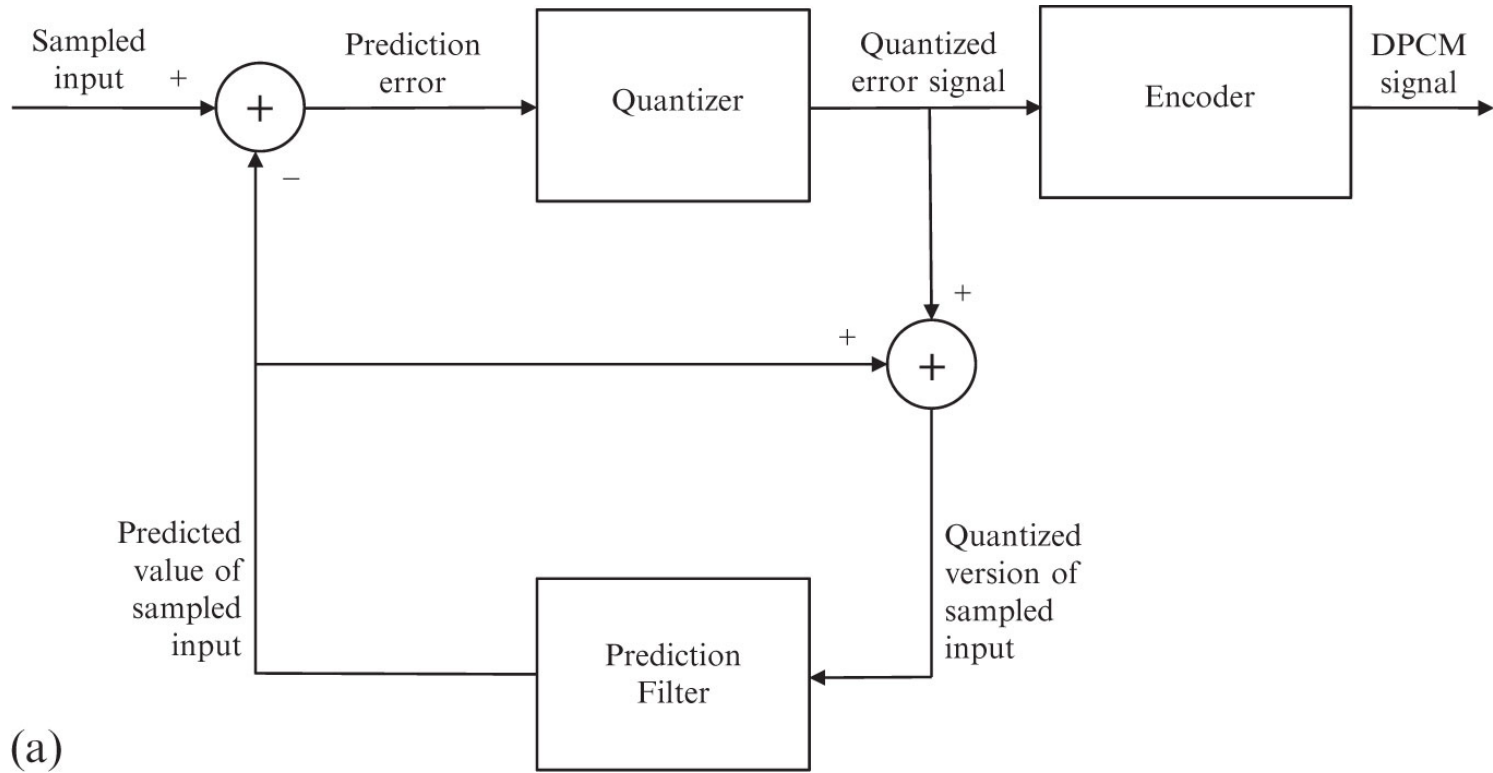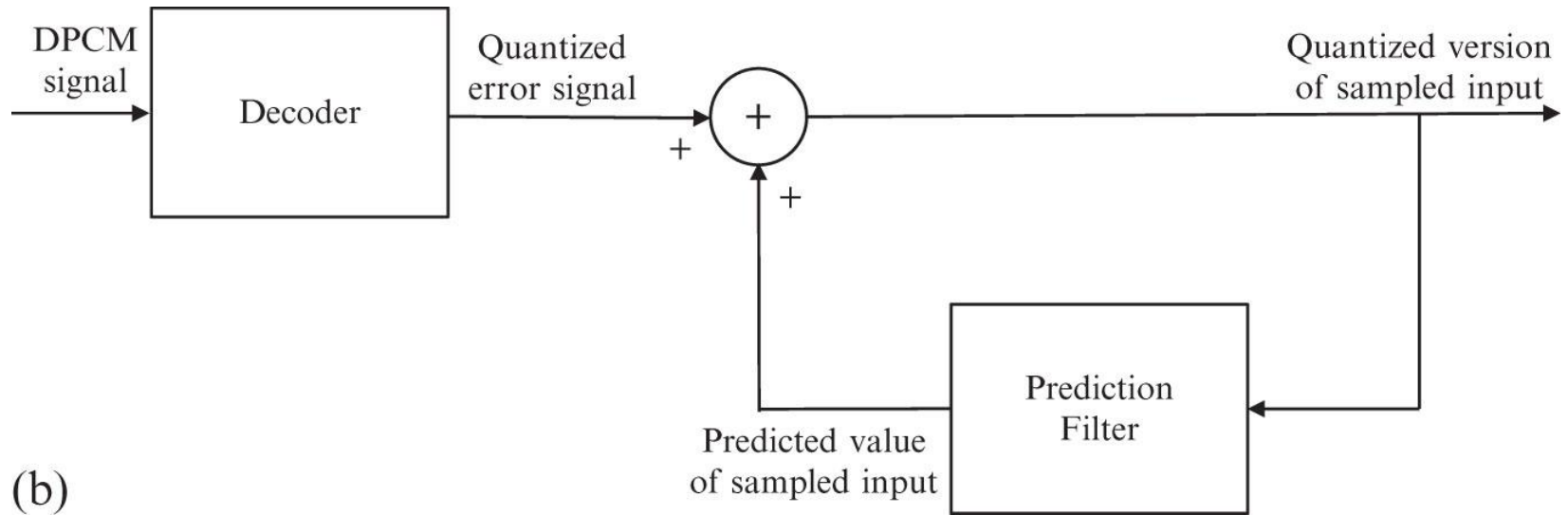**Figure 5.17a** Relationship among sample space, events, and probability.

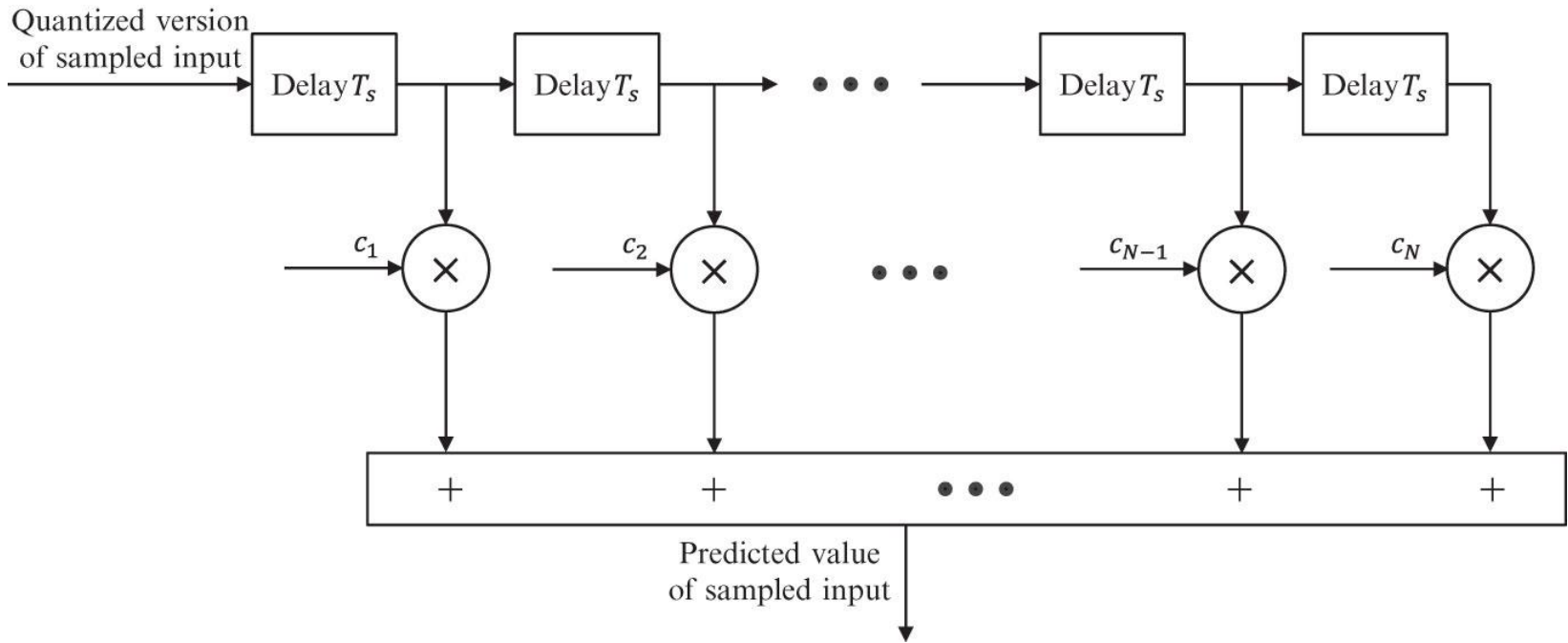**Figure 5.17b** Relationship among sample space, events, and probability.

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Figure 5.18 Relationship among sample space, events, and probability.

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Figure 5.19a Relationship among sample space, events, and probability.

Figure 5.19b Relationship among sample space, events, and probability.

Figure 5.20 Relationship among sample space, events, and probability.

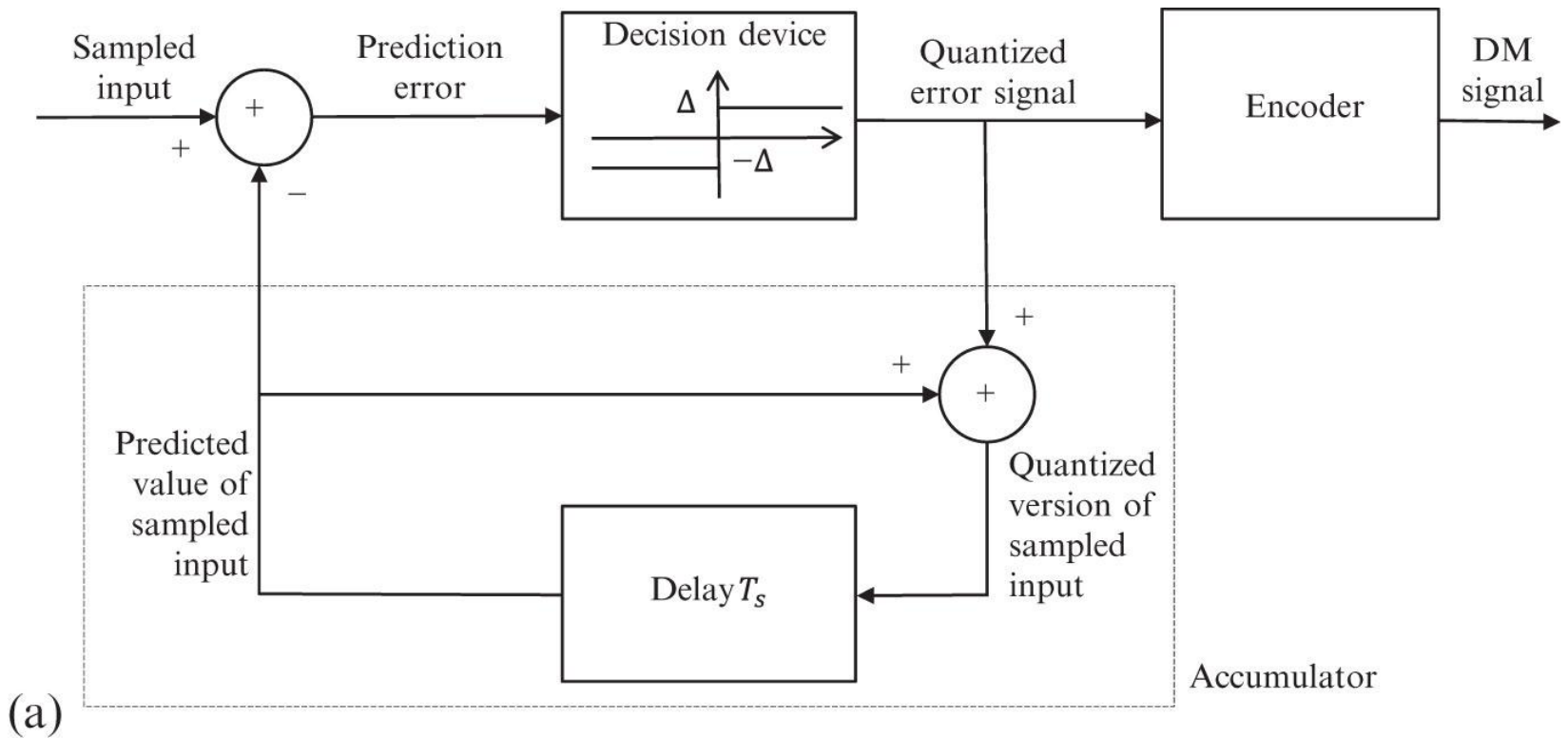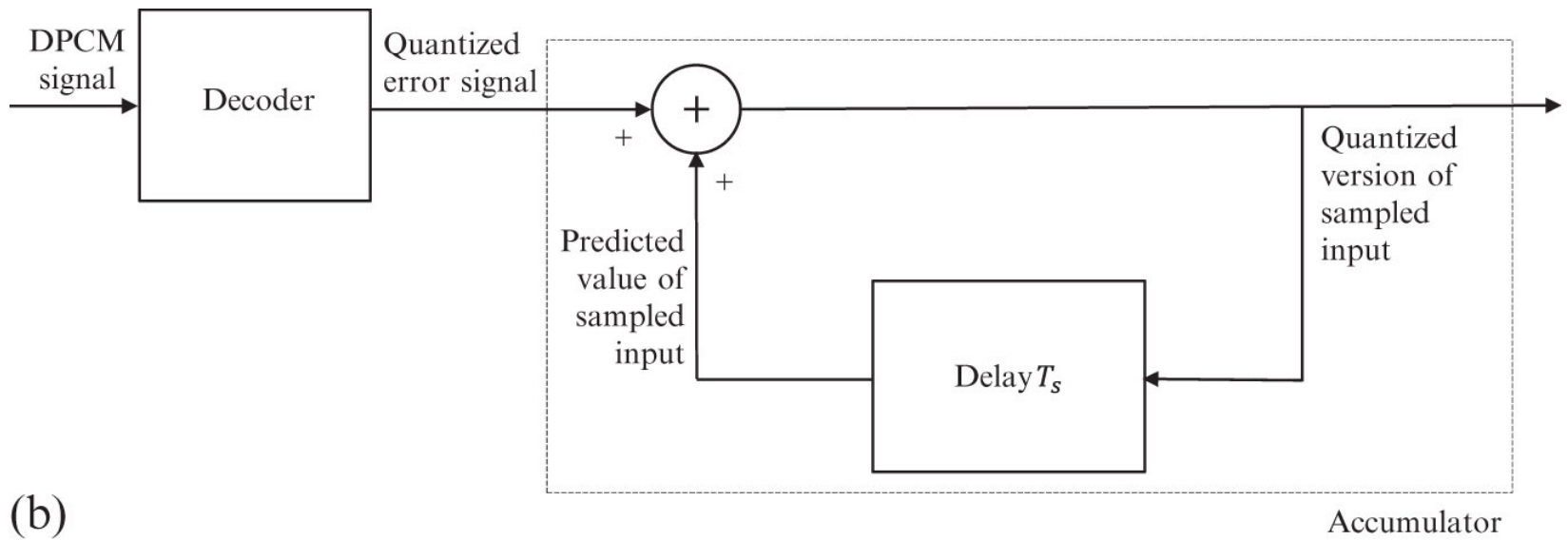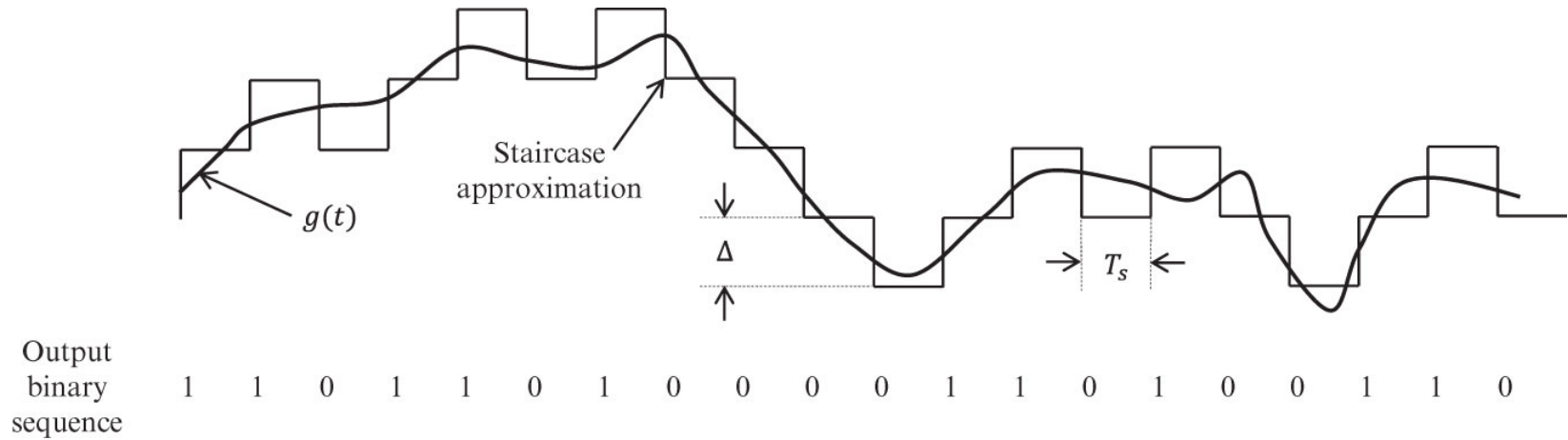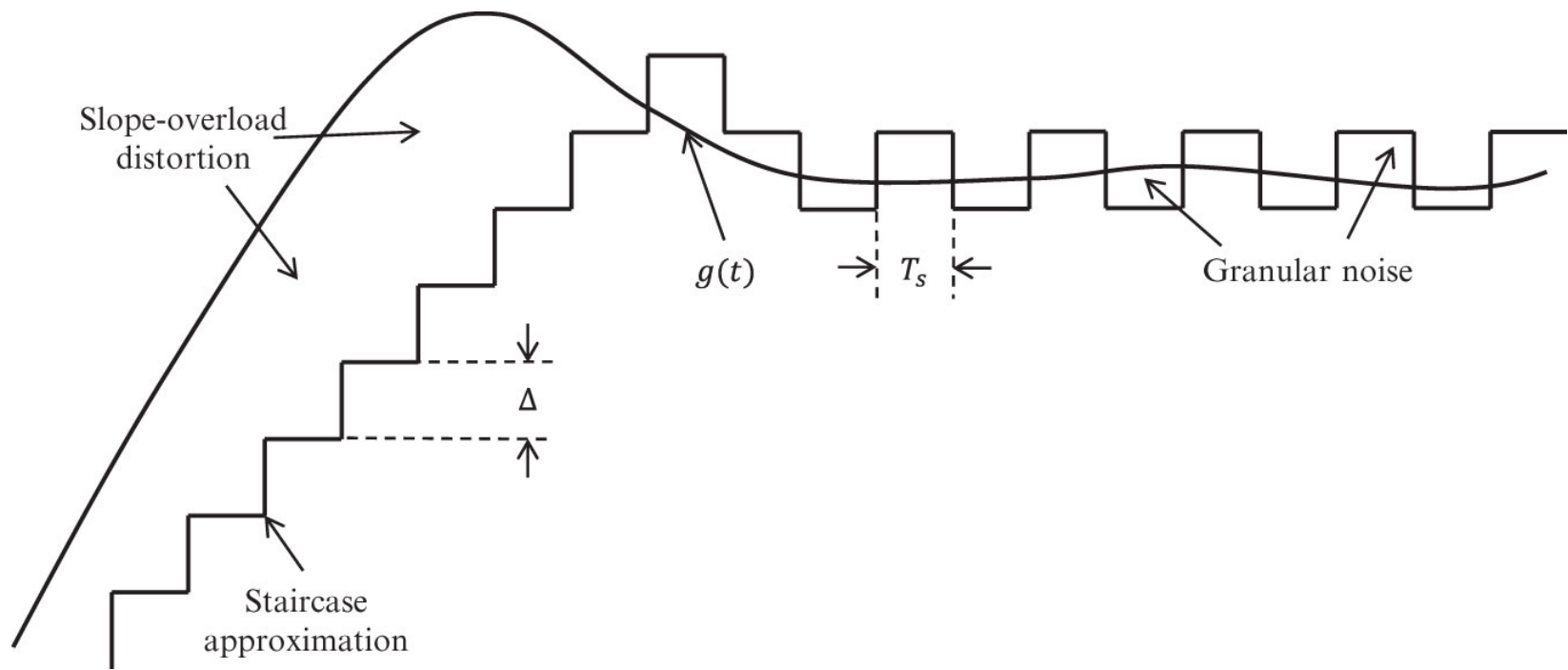Figure 5.21 Relationship among sample space, events, and probability.

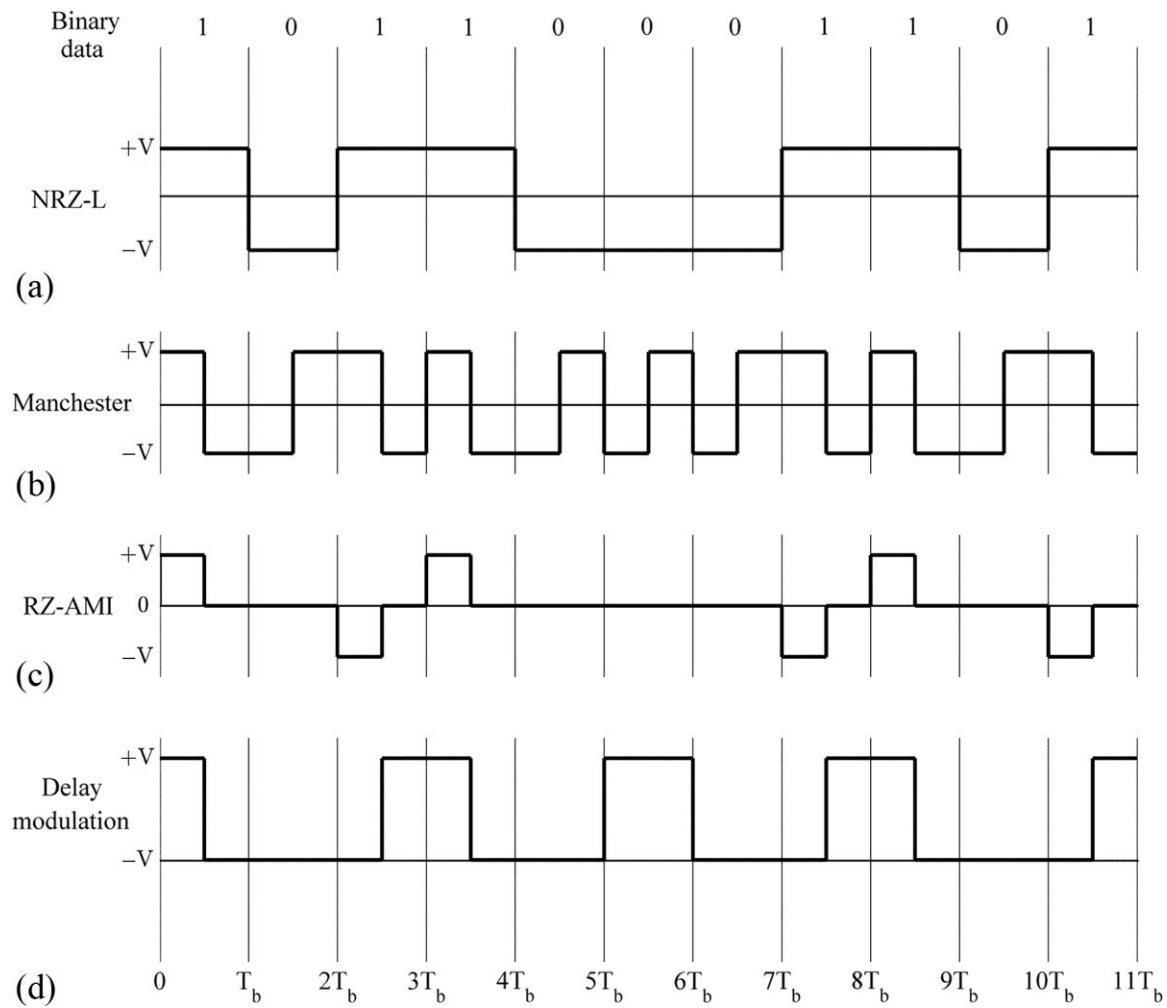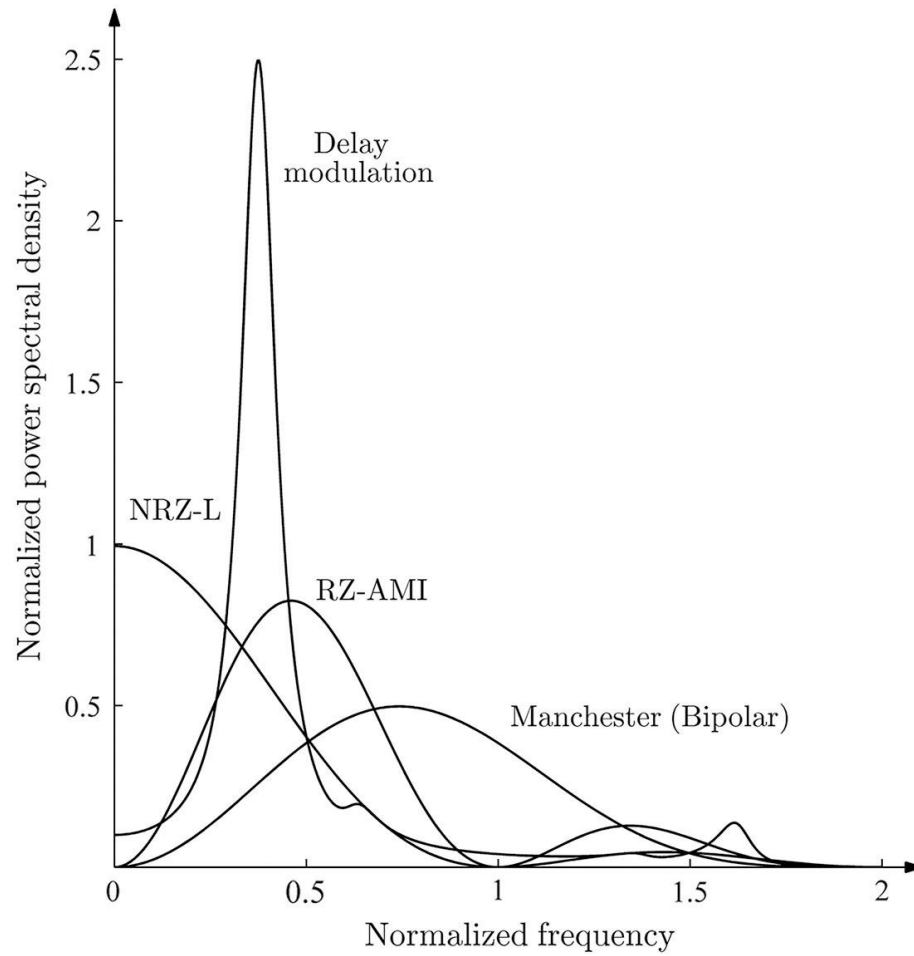**Figure 5.22** Various line codes.

Figure 5.23 Power spectral densities of various line codes.