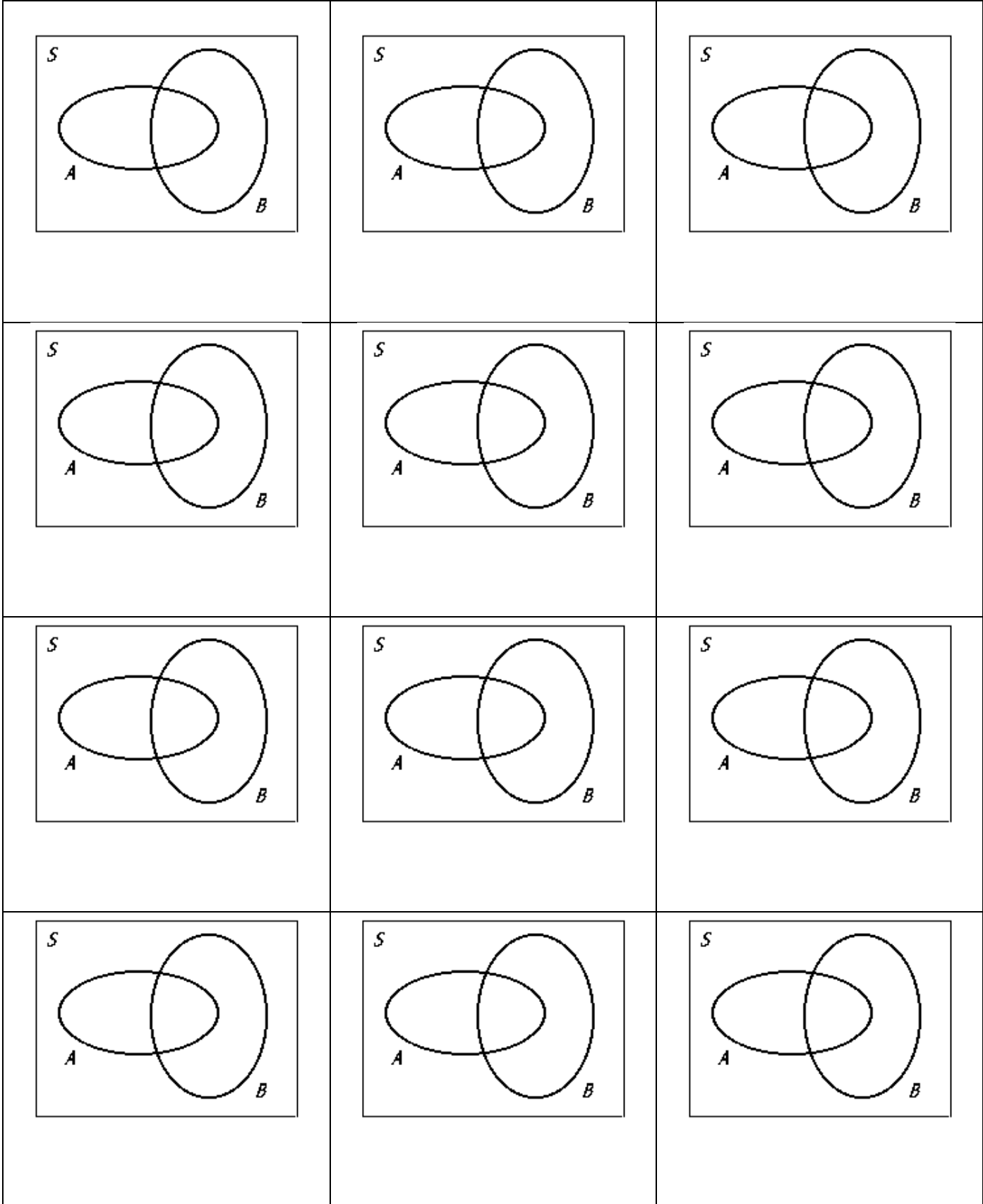


12 FOM: Identifying Regions of the Venn Diagram



A. Draw a Venn diagram to show the following information:

$$U = \{\text{natural numbers from 1 to 30 inclusive}\}$$

$$E = \{\text{multiples of 2}\}$$

$$F = \{\text{multiples of 8}\}$$

$$G = \{\text{multiples of 3}\}$$

Write down:

$$n(U) =$$

$$n(E) =$$

$$n(F) =$$

$$n(G) =$$

$$n(G \cap E) =$$

$$n(G \cup E) =$$

B. Draw a Venn diagram to represent the following information:

- There are 28 students on the school track and field team.
- 15 have black hair;
- 8 have blue eyes,
- 10 do not have black hair or blue eyes

- a) How many students have black hair and blue eyes?
- b) How many students have black hair but not blue eyes?
- c) How many students have blue eyes but not black hair?
- d) What fraction of students with black hair have blue eyes?