

Compound Events

Name _____

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Date _____

Determine if events A and B are mutually exclusive.

1) $P(A) = \frac{1}{2}$ $P(B) = \frac{11}{20}$ $P(A \text{ or } B) = \frac{31}{40}$

2) $P(A) = \frac{2}{5}$ $P(B) = \frac{7}{20}$ $P(A \text{ or } B) = \frac{3}{4}$

3) $P(A) = \frac{1}{5}$ $P(B) = \frac{7}{20}$ $P(A \text{ or } B) = \frac{11}{20}$

4) $P(A) = \frac{1}{2}$ $P(B) = \frac{4}{5}$ $P(A \text{ or } B) = \frac{9}{10}$

5) $P(A) = \frac{2}{5}$ $P(B) = \frac{9}{20}$ $P(A \text{ or } B) = \frac{17}{20}$

6) $P(A) = \frac{3}{10}$ $P(B) = \frac{1}{2}$ $P(A \text{ or } B) = \frac{13}{20}$

Events A and B are mutually exclusive. Find the missing probability.

7) $P(A) = \frac{3}{10}$ $P(A \text{ or } B) = \frac{13}{20}$ $P(B) = ?$

8) $P(A) = \frac{1}{5}$ $P(A \text{ or } B) = \frac{9}{20}$ $P(B) = ?$

9) $P(A) = \frac{9}{20}$ $P(B) = \frac{1}{5}$ $P(A \text{ or } B) = ?$

10) $P(A) = \frac{9}{20}$ $P(B) = \frac{7}{20}$ $P(A \text{ or } B) = ?$

11) $P(B) = \frac{9}{20}$ $P(A \text{ or } B) = \frac{13}{20}$ $P(A) = ?$

12) $P(A) = \frac{9}{20}$ $P(B) = \frac{9}{20}$ $P(A \text{ or } B) = ?$

Find the missing probability.

$$13) P(A) = \frac{13}{20} \quad P(A \text{ or } B) = \frac{169}{200} \quad P(A \text{ and } B) = \frac{91}{200} \quad P(B) = ?$$

$$14) P(A) = \frac{11}{20} \quad P(B) = \frac{7}{10} \quad P(A \text{ and } B) = \frac{77}{200} \quad P(A \text{ or } B) = ?$$

$$15) P(A) = \frac{11}{20} \quad P(A \text{ or } B) = \frac{53}{80} \quad P(A \text{ and } B) = \frac{11}{80} \quad P(B) = ?$$

$$16) P(A) = \frac{11}{20} \quad P(B) = \frac{1}{4} \quad P(A \text{ and } B) = \frac{11}{80} \quad P(A \text{ or } B) = ?$$

$$17) P(A) = \frac{7}{20} \quad P(B) = \frac{7}{20} \quad P(A \text{ and } B) = \frac{63}{400} \quad P(A \text{ or } B) = ?$$

$$18) P(A) = \frac{1}{4} \quad P(B) = \frac{9}{20} \quad P(A \text{ or } B) = \frac{47}{80} \quad P(A \text{ and } B) = ?$$

Answers to Compound Events

1) Not mutually exclusive

2) Mutually exclusive

3) Mutually exclusive

4) Not mutually exclusive

5) Mutually exclusive

6) Not mutually exclusive

7) $\frac{7}{20}$

8) $\frac{1}{4}$

9) $\frac{13}{20}$

10) $\frac{4}{5}$

11) $\frac{1}{5}$

12) $\frac{9}{10}$

13) $\frac{13}{20}$

14) $\frac{173}{200}$

15) $\frac{1}{4}$

16) $\frac{53}{80}$

17) $\frac{217}{400}$

18) $\frac{9}{80}$

