Math 2   Name _____

Probability of Compound Events   Date _____ Per ____

In problems 1-4, events A and B are mutually exclusive. Find the P(A and B).

1. P(A) = 0.2, P(B) = 0.3   2. P(A) = 0.5. P(B) = .05

3. $P(A) = \frac{3}{8}, P(B) = \frac{1}{8}$ 4. $P(A) = \frac{1}{3}, P(B) = \frac{1}{4}$

Find P(A or B)

5. P(A) = 0.2, P(B) = 0.6   6. $P(A) = \frac{2}{5}, P(B) = \frac{3}{5}$

   P(A and B) = 0.4 $P(A \text{ and } B) = \frac{1}{5}$

Find P(A and B)

7. P(A) = 0.7, P(B) = 0.2   8. $P(A) = \frac{3}{4}, P(B) = \frac{3}{4}$

   P(A or B) = 0.5 $P(A \text{ or } B) = \frac{1}{2}$

Find the Indicated probability. State whether A and B are mutually exclusive.

9. P(A) = 0.4

    P(B) = 0.35

    P(A or B) = 0.5

    P(A and B) = ?

10. P(A) = 0.6

    P(B) = 0.2

    P(A or B) = ?

    P(A and B) =

11. P(A) = 0.25

    P(B) = ?

    P(A or B) = 0.7

    P(A and B) = 0

12. $P(A) = \frac{13}{17}$

    P(B) = ?

    $P(A \text{ or } B) = \frac{14}{17}$

    $P(A \text{ and } B) = \frac{6}{17}$

13. $P(A) = \frac{1}{3}$

    $P(B) = \frac{1}{4}$

    $P(A \text{ or } B) = \frac{7}{12}$

    P(A and B) = ?

14. $P(A) = \frac{3}{4}$

    $P(B) = \frac{1}{3}$

    P(A or B) = ?

    $P(A \text{ and } B) = \frac{1}{4}$

15. P(A) = 5%

    P(B) = 29%

    P(A or B) = ?

    P(A and B) = 0%

16. P(A) = 30%

    P(B) = ?

    P(A or B) = 10%

    P(A and B) = 50%

17. P(A) = 16%

    P(B) = 24%

    P(A or B) = 32%

    P(A and B) = ?