

10.3 HW Simple Probability & "Or" Probability

Name: Key

Directions: Find each probability.

- 1) P(rolling a 5 on a die)

$$\frac{1}{6}$$

- 2) P(heads or tails on a coin).

$$\frac{1}{2} + \frac{1}{2} = \frac{2}{2} = \boxed{1}$$

- 3) Find the probability of getting a blue sock out of a dryer that holds 10 blue socks, 5 red socks, and 3 white socks.

$$\frac{10}{18} = \boxed{\frac{5}{9}}$$

- 4) P(prime number on a die)

$$\frac{4}{6} = \boxed{\frac{2}{3}}$$

- 5) Find the probability of picking a heart or 5 from a deck of cards.

$$\frac{13}{52} + \frac{4}{52} - \frac{1}{52} = \frac{16}{52} = \boxed{\frac{4}{13}}$$

- 6) P(face card from a deck of cards)

$$\frac{12}{52} = \boxed{\frac{3}{13}}$$

- 7) What is the complement of rolling a 5 on a die?

$$1 - \frac{1}{6} = \boxed{\frac{5}{6}}$$

- 8) What is P(5 on a die)? ← Not

$$1 - \frac{1}{6} = \boxed{\frac{5}{6}}$$

- 9) P(heart or diamond from a deck of cards)

$$\frac{13}{52} + \frac{13}{52} = \frac{26}{52} = \boxed{\frac{1}{2}}$$

- 10) P(card between 4 and 8 or an even number card)

$$\frac{12}{52} + \frac{20}{52} - \frac{4}{52} = \frac{28}{52} = \boxed{\frac{7}{13}}$$

Directions: Complete the sum chart and use it to find each probability.

	1	2	3	4	5	6
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11
6	7	8	9	10	11	12

- 13) Find P(even or odd sum)

$$\frac{18}{36} + \frac{18}{36} = \frac{36}{36} = \boxed{1}$$

- 11) What is the probability of getting an even sum or a five?

$$\frac{18}{36} + \frac{4}{36} = \frac{22}{36} = \boxed{\frac{11}{18}}$$

- 12) Find P(sum of 6 or a multiple of 2)

$$\frac{5}{36} + \frac{18}{36} - \frac{5}{36} = \frac{18}{36} = \boxed{\frac{1}{2}}$$

- 14) Find P(sum greater 10 or an even sum) ←

$$\frac{3}{36} + \frac{18}{36} - \frac{1}{36} = \frac{20}{36} \quad 1 - \frac{20}{36} = \frac{16}{36} = \boxed{\frac{4}{9}}$$

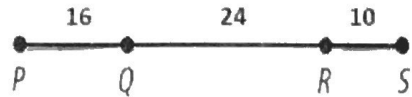
- 15) What is P(even sum or a multiple of 4)

$$\frac{18}{36} + \frac{9}{36} - \frac{2}{36} = \frac{25}{36} = \boxed{\frac{25}{36}}$$

- 16) What is P(even sum or a multiple of 3)

$$\frac{18}{36} + \frac{12}{36} - \frac{6}{36} = \frac{24}{36} = \boxed{\frac{2}{3}}$$

Directions: Find each probability using the given figure.



17)  $P(\text{point is on } \overline{RS}) = \frac{10}{34} = \boxed{\frac{5}{17}}$

18)  $P(\text{point is not on } \overline{PR}) = \frac{10}{34} = \boxed{\frac{5}{17}}$

19)  $P(\text{point is on } \overline{RS} \text{ or } \overline{PQ}) = \frac{10}{34} + \frac{16}{34} = \frac{26}{34} = \boxed{\frac{13}{17}}$

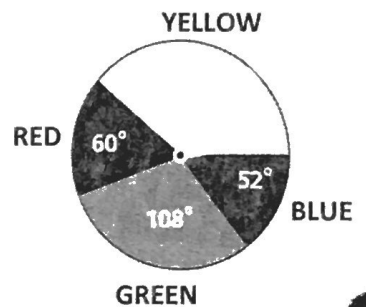
20)  $P(\text{point is on } \overline{RS}) = \frac{10}{34} = \frac{5}{17} \quad 1 - \frac{5}{17} = \boxed{\frac{12}{17}}$

Directions: Find each probability using the given figure.

21)  $P(\text{pointer landing on red or green}) = \frac{60}{360} + \frac{108}{360} = \frac{168}{360} = \boxed{\frac{7}{15}}$

22)  $P(\text{pointer landing on an obtuse central angle}) = \frac{108}{360} + \frac{140}{360} = \frac{248}{360} = \boxed{\frac{31}{45}}$

23)  $P(\text{pointer not landing on red}) = \frac{140}{360} + \frac{52}{360} + \frac{108}{360} = \frac{300}{360} = \boxed{\frac{5}{6}}$



Directions: A dart is thrown at the following figure. Find each probability using the given figure.

24)  $P(\text{point lands in the circle}) = \frac{81\pi}{1400} = \boxed{.18}$

25)  $P(\text{point lands in a square}) = \frac{200}{1400} = \boxed{\frac{1}{7}}$

26)  $P(\text{point lands in a trapezoid or circle}) = \frac{450}{1400} = \boxed{\frac{9}{28}}$

27)  $P(\text{point lands in a trapezoid}) = \frac{450}{1400} = \boxed{\frac{9}{28}}$

28)  $P(\text{does not land in a square, trapezoid, or circle}) = \frac{200 + 450}{1400} = \boxed{\frac{13}{28}}$

