Name _____ Date _____ Class _____

Focus on CAHSEE Standards: Benchmark Tests

STANDARD 6PS3.5 **Benchmark Pre-Test Statistics, Data Analysis, and Probability** 3.5

1. Robert has the following marbles in a jar.

Red	Blue	Green	Orange
2	4	3	1

What is the probability that Robert will select a blue marble, and then, without replacing the blue marble, select a green marble?

A $\frac{2}{15}$ **C** $\frac{3}{25}$

B $\frac{7}{10}$ **D** $\frac{22}{45}$

2. Paula has put some of her favorite baseball, football, and basketball cards into a box.

Baseball	Football	Basketball
3	2	3

What is the probability that Paula will select a football card and then, after putting it back into the box, select a baseball card?

A $\frac{2}{3}$ **C** $\frac{19}{28}$

B $\frac{3}{28}$ **D** $\frac{3}{32}$

3. Jeff has 4 red apples and 2 green apples in a sack. Find the probability that Jeff will select 2 green apples in a row if he does not put the first apple back into the sack.

A $\frac{8}{15}$ **C** $\frac{1}{6}$

B $\frac{1}{15}$ **D** $\frac{1}{9}$

4. Maxine rolls a 6-sided cube twice in a row. What is the probability that Maxine will roll a 6 each time?

A $\frac{1}{36}$ **C** $\frac{1}{3}$

B $\frac{1}{30}$ **D** $\frac{11}{30}$

5. The table below shows the number of tennis balls that Jorge has in a box.

Green	Orange	White
3	7	2

If Jorge chooses a tennis ball without looking, replaces it, and then chooses another, what is the probability that he chooses a white ball and then a green ball?

A $\frac{1}{22}$ **C** $\frac{1}{24}$

B $\frac{5}{12}$ **D** $\frac{29}{66}$

6. Tess has a box with 3 green marbles, 8 red marbles, and 1 blue marble. If she picks one marble out of the box and, without replacing it, picks a second marble, what is the probability that she will pick a red and then a blue marble?

A $\frac{3}{4}$ **C** $\frac{2}{33}$

B $\frac{1}{18}$ **D** $\frac{2}{36}$

GO ON

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STANDARD 6PS3.5 Focus on CAHSEE Standards: Benchmark Tests

Benchmark Pre-Test Statistics, Data Analysis, and Probability 3.5 *(cont.)*

7. The table below shows the marbles Celeste has in a jar.

Purple	Red	Orange	Yellow
2	7	1	4

What is the probability of Celeste selecting a purple marble and then, after replacing the purple marble, selecting a red one?

A $\frac{1}{14}$ **C** $\frac{1}{13}$

B $\frac{9}{14}$ **D** $\frac{9}{28}$

8. Alex has filled a can with 8 white buttons, 2 black buttons, and 2 red buttons. He picks a button from the can, and then, without replacing the first button, picks a second button. What is the probability that Alex picks two black buttons in a row?

A $\frac{1}{3}$ **C** $\frac{1}{11}$

B $\frac{1}{72}$ **D** $\frac{1}{66}$

9. William has a spinner numbered 1 to 8. If William spins it twice in a row, what is the probability that he will spin a 2 and then a 5?

A $\frac{1}{4}$ **C** $\frac{1}{64}$

B $\frac{1}{56}$ **D** $\frac{15}{56}$

10. The table below shows the type and number of counters John keeps in a box.

Blue	Black	Red	Grey	Green
10	1	7	2	1

John selects 2 counters in a row. He does not replace them. What is the probability that he has selected two red counters?

A $\frac{13}{21}$ **C** $\frac{2}{21}$

B $\frac{1}{10}$ **D** $\frac{7}{60}$

11. Patricia has a drawer containing 2 black pairs of socks, 3 white pairs, and 5 red pairs. She pulls out two pairs of socks without replacing them. What is the probability that she has pulled out a black pair and then a white pair?

A $\frac{1}{15}$ **C** $\frac{8}{15}$

B $\frac{3}{50}$ **D** $\frac{1}{10}$

12. A box contains several prize tickets. Each prize ticket is good for one prize. There are 10 prize tickets for a book, 5 for a bike lock, and 5 for a free lunch. Shara drew one prize ticket, put it back, and then drew another. What is the probability that she drew 2 prize tickets for a bike lock?

A $\frac{1}{2}$ **C** $\frac{1}{19}$

B $\frac{1}{20}$ **D** $\frac{1}{16}$

STOP