

Tell whether the events are **INDEPENDENT** or **DEPENDENT**.

(circle one)

1. You randomly choose 1 of 10 pens from a box and replace it. Then you choose one more pen.

INDEPENDENT or **DEPENDENT**

2. You roll a number cube twice. You get a 2 and a 5.

INDEPENDENT or **DEPENDENT**

3. You toss a coin. If it is heads, you toss it again. If it is tails, you quit.

INDEPENDENT or **DEPENDENT**

4. A container has 5 black buttons, 3 white buttons and 1 blue buttons. You reach in and randomly draw out a blue button. You return the blue button and reach in again to draw out a black button.

INDEPENDENT or **DEPENDENT**

A tank holds 5 trout, 3 bass, and 4 perch. You catch a fish randomly.

Use the above information to answer the following WITHOUT replacement.

5. Find P (trout, trout)

6. Find P (bass and then perch)

7. Find P (perch, perch)

Use the above information to answer the following WITH replacement.

8. Find P (trout, trout)

9. Find P (bass and then perch)

10. Find P (2 bass)

Find each probability.

Each item IS NOT REPLACED.

11. A bag contains 4 red and 5 yellow marbles. Choose a yellow one, keep it, and choose another yellow one.

Find each probability.

Each item IS REPLACED.

12. A box contains 4 red and 5 yellow marbles. Choose a yellow one, replace it, and choose another yellow one.

1. Independent	2. Independent	3. Dependent	4. Independent	5. $P(\text{trout, trout}) = \frac{35}{36}$
6. $P(\text{Bass, Perch}) = \frac{11}{1}$	7. $P(\text{Perch, Perch}) = \frac{11}{1}$	8. $P(\text{trout, trout}) = \frac{144}{25}$	9. $P(\text{Bass, Perch}) = \frac{12}{1}$	10. $P(2 \text{ Bass}) = \frac{1}{36}$
11. $P(\text{Yellow, Red}) = \frac{18}{5}$	12. $P(\text{Yellow, Red}) = \frac{18}{25}$			