

I pledge my honor that I have neither given nor received aid on this exam.

NAME

Z NUMBER

Show all work (attach work pages). Write on one side of page only. Write answers in space provided. Staple in upper left-hand corner.

Consider three identical-looking coins. Two of the coins are ordinary fair coins (H and T are equally likely to occur on any toss), but the third coin is 2-headed (both sides of the coin show H). Fran and Ron each chooses a coin at random, and the remaining coin is discarded. Suppose that Fran and Ron toss their coins simultaneously.

1. Find the probability that Fran gets H.

$$\frac{2}{3}$$

2. Find the probability that Ron gets H.

$$\frac{2}{3}$$

3. Find the probability that Fran gets H and Ron gets H.

$$\frac{5}{12}$$

4. Find the probability that Fran gets H if it is known that Ron got H.

$$\frac{5}{8}$$

5. Find the probability that Fran gets H if it is known that Ron got T.

$$\frac{3}{4}$$

6. Find the probability that either Fran or Ron (or both) gets H.

$$\frac{11}{12}$$