

Appendix II Experimental instructions

Two-person budget set

Introduction This is an experiment in decision-making. Research foundations have provided funds for conducting this research. Your payoffs will depend partly on your decisions and the decisions of the other participants and partly on chance. Please pay careful attention to the instructions as a considerable amount of money is at stake.

The entire experiment should be complete within an hour and a half. At the end of the experiment you will be paid privately. At this time, you will receive \$5 as a participation fee (simply for showing up on time). Details of how you will make decisions and receive payments will be provided below.

During the experiment we will speak in terms of experimental tokens instead of dollars. Your payoffs will be calculated in terms of tokens and then translated at the end of the experiment into dollars at the following rate: 3 Tokens = 1 Dollar.

A decision problem In this experiment, you will participate repeatedly in 50 independent decision problems that share a common form. This section describes in detail the process that will be repeated in all decision problems and the computer program that you will use to make your decisions.

In each decision problem you will be asked to allocate tokens between yourself (Hold) and another person (Pass) who will be chosen at random from the group of participants in the experiment. The other person will not be told of your identity. Note that the person will be different in each problem. For each allocation, you and the other person will each receive tokens.

Each choice will involve choosing a point on a graph representing possible token allocations. In each choice, you may choose any Hold / Pass pair that is in the region that is shaded in gray. Examples of regions that you might face appear in Attachment 1.

[Attachment 1 here]

Each decision problem will start by having the computer select such a region randomly from the set of regions that intersect with either the Hold-axis or the Pass-axis at 50 tokens or more. The regions selected for you in different decision problems are independent of each other and of the regions selected for any of the other participants in their decision problems.

For example, as illustrated in Attachment 2, choice A represents an allocation in which you Hold y tokens and Pass x tokens. Thus, if you choose this allocation, you will receive y tokens and the participant with whom you are matched in that round will receive x tokens. Another possible allocation is B , in which you receive w tokens, and person with whom you are matched receives z tokens.

[Attachment 2 here]

To choose an allocation, use the mouse or the arrows on the keyboard to move the pointer on the computer screen to the allocation that you desire. At any point, you may either right-click or press the Space key to find out the allocation that the pointer is at.

When you are ready to make your decision, either left-click or press the Enter key to submit your chosen allocation. After that, confirm your decision by clicking on the Submit button or pressing the Enter key. Note that you can choose only Hold / Pass combinations that are in the gray region. To move on to the next round, press the OK button.

Next, you will be asked to make an allocation in another independent decision. This process will be repeated until all the 50 rounds are completed. At the end of the last round, you will be informed the experiment has ended. **Payoffs** Your payoffs are determined as follows. At the end of the experiment, the computer will randomly select one decision round from each participant to carry out. That participant will then receive the tokens that she held in this round, and the participant with whom she was matched will receive the tokens that she passed.

Each participant will therefore receive two groups of tokens, one based on her own decision to hold tokens and one based on the decision of another random participant to pass tokens. The computer will ensure that the same two participants are not paired twice.

The round selected and your choice and your payment for the round will be recorded in the large window that appears at the center of the program dialog window. At the end of the experiment, the tokens will be converted into money. Each token will be worth 1/3 Dollars. You will receive your payment as you leave the experiment.

Rules Your participation in the experiment and any information about your payoffs will be kept strictly confidential. Your payment-receipt and participant form are the only places in which your name and social security number are recorded.

You will never be asked to reveal your identity to anyone during the course of the experiment. Neither the experimenters nor the other participants will be able to link you to any of your decisions. In order to keep your decisions private, please do not reveal your choices to any other participant.

Please do not talk with anyone during the experiment. We ask everyone to remain silent until the end of the last round. If there are no further questions, you are ready to start. An instructor will approach your desk and activate your program.

Three-person budget set

Introduction This is an experiment in decision-making. Research foundations have provided funds for conducting this research. Your payoffs will depend partly on your decisions and the decisions of the other participants and partly on chance. Please pay careful attention to the instructions as a considerable amount of money is at stake.

The entire experiment should be complete within an hour and a half. At the end of the experiment you will be paid privately. At this time, you will receive \$5 as a participation fee (simply for showing up on time). Details of how you will make decisions and receive payments will be provided below.

During the experiment we will speak in terms of experimental tokens instead of dollars. Your payoffs will be calculated in terms of tokens and then translated at the end of the experiment into dollars at the following rate: 4 Tokens = 1 Dollar.

A decision problem In this experiment, you will participate in 50 independent decision problems that share a common form. This section describes in detail the process that will be repeated in all decision problems and the computer program that you will use to make your decisions.

In each decision problem you will be asked to allocate tokens between yourself (Hold) and two other persons, *A* (Pass *A*) and *B* (Pass *B*) who will be chosen at random from the group of participants in the experiment. The other persons will not be told of your identity. Note that the persons will be chosen at around in each problem. For each allocation, you and the two other persons will each receive tokens.

Each choice will involve choosing a point on a three-dimensional graph representing possible token allocations, Hold / Pass *A* / Pass *B*. In each choice, you may choose any combination of Hold / Pass *A* / Pass *B* that is on the plane that is shaded in gray. Examples of planes that you might face appear in Attachment 3.

[Attachment 3 here]

Each decision problem will start by having the computer select such a plane randomly from the set of planes that intersect with at least one of the axes (Hold-axis, Pass *A*-axis or Pass *B*-axis) at 50 tokens or more but with no intercept exceeding 100 tokens. The planes selected for you in different decision problems are independent of each other and independent of the planes selected for any of the other participants in their decision problems.

For example, as illustrated in Attachment 4, choice 1 represents an allocation in which you hold approximately 20 tokens (Hold), pass 40 tokens to person *A* (Pass *A*) and 10 tokens to person *B* (Pass *B*). Thus, if you choose this allocation, you will receive 20 tokens, the participant with whom you are matched as person *A* in that round will receive 40 tokens and the participant with whom you are matched as person *B* in that round will receive 10 tokens. Another possible allocation is choice 2, in which you receive approximately 30 tokens (Hold), the participant with whom you are matched as person *A* receives 10 tokens (Pass *A*) and the participant with whom you are matched as person *B* receives 20 tokens (Pass *B*).

[Attachment 4 here]

To choose an allocation, use the mouse to move the pointer on the computer screen to the allocation that you desire. On the right hand side of the program dialog window, you will be informed of the exact allocation that the pointer is located. When you are ready to make your decision, left-click to enter your chosen allocation. After that, confirm your decision by clicking on the Submit button. Note that you can choose only Hold / Pass *A* / Pass *B* combinations that are on the gray plane. To move on to the next round, press the OK button. The computer program dialog window is shown in Attachment 5.

[Attachment 5 here]

Next, you will be asked to make an allocation in another independent decision problem. This process will be repeated until all 50 rounds are completed. At the end of the last round, you will be informed the experiment has ended.

Earnings Your payoffs are determined as follows. At the end of the experiment, the computer will randomly select one decision round (that is, 1 out of 50) from each participant to carry out. That participant will then receive the tokens that she allocated to Hold in this round, the participant with

whom she was matched as person *A* will receive the tokens that she allocated to Pass *A* and the participant with whom she was matched as person *B* will receive the tokens that she allocated to Pass *B*. The round selected depends solely upon chance. For each participant, it is equally likely that any round will be chosen.

Each participant will therefore receive three groups of tokens, one based on her own decision to hold tokens, one based on the decision of another random participant to pass tokens to her as person *A* and one based on the decision of another random participant to pass tokens to her as person *B*. The computer will ensure that the same two participants are not matched more than once.

The round selected, your choice and your payment will be shown in the large window that appears at the center of the program dialog window. At the end of the experiment, the tokens will be converted into money. Each token will be worth 0.25 Dollars. Your final earnings in the experiment will be your earnings in the round selected plus the \$5 show-up fee. You will receive your payment as you leave the experiment.

Rules Your participation in the experiment and any information about your payoffs will be kept strictly confidential. Your payment-receipt and participant form are the only places in which your name and social security number are recorded.

You will never be asked to reveal your identity to anyone during the course of the experiment. Neither the experimenters nor the other participants will be able to link you to any of your decisions. In order to keep your decisions private, please do not reveal your choices to any other participant.

Please do not talk with anyone during the experiment. We ask everyone to remain silent until the end of the last round. If there are no further questions, you are ready to start. An instructor will approach your desk and activate your program.

Step-shaped set

Introduction This is an experiment in decision-making. Research foundations have provided funds for conducting this research. Your payoffs will depend partly on your decisions and the decisions of the other participants and partly on chance. Please pay careful attention to the instructions as a considerable amount of money is at stake.

The entire experiment should be complete within an hour and a half. At the end of the experiment you will be paid privately. At this time, you will

receive \$5 as a participation fee (simply for showing up on time). Details of how you will make decisions and receive payments will be provided below.

During the experiment we will speak in terms of experimental tokens instead of dollars. Your payoffs will be calculated in terms of tokens and then translated at the end of the experiment into dollars at the following rate: 3 Tokens = 1 Dollar.

A decision problem In this experiment, you will participate repeatedly in 50 independent decision problems that share a common form. This section describes in detail the process that will be repeated in all decision problems and the computer program that you will use to make your decisions.

In each decision problem you will be asked to allocate tokens between yourself (Hold) and another person (Pass) who will be chosen at random from the group of participants in the experiment. The other person will not be told of your identity. Note that the person will be different in each problem. For each allocation, you and the other person will each receive tokens.

Each choice will involve choosing a point on a graph representing possible token allocations. The y -axis and x -axis are labeled Hold and Pass respectively and scaled from 0 to 100 tokens. In each choice, you may choose any Hold / Pass pair that is in the step-shaped region that is shaded in gray. Examples of regions that you might face appear in Attachment 6.

[Attachment 6 here]

Each decision problem will start by having the computer select such a step-shaped region randomly. That is, the region selected depends solely upon chance and is equally likely to be any step-shaped region. The regions selected for you in different decision problems are independent of each other and of the regions selected for any of the other participants in their decision problems.

For example, as illustrated in Attachment 7, choice A represents an allocation in which you Hold q tokens and Pass r tokens. Thus, if you choose this allocation, you will receive q tokens and the participant with whom you are matched in that round will receive r tokens. Another possible allocation is B , in which you receive s tokens, and person with whom you are matched receives t tokens.

[Attachment 7 here]

To choose an allocation, use the mouse or the arrows on the keyboard to move the pointer on the computer screen to the allocation that you desire.

At any point, you may either right-click or press the Space key to find out the allocation that the pointer is at.

When you are ready to make your decision, either left-click or press the Enter key to submit your chosen allocation. After that, confirm your decision by clicking on the Submit button or pressing the Enter key. Note that you can choose only Hold / Pass combinations that are in the gray region. To move on to the next round, press the OK button.

Next, you will be asked to make an allocation in another independent decision. This process will be repeated until all the 50 rounds are completed. At the end of the last round, you will be informed the experiment has ended. **Payoffs** Your payoffs are determined as follows. At the end of the experiment, the computer will randomly select one decision round from each participant to carry out. That participant will then receive the tokens that she held in this round, and the participant with whom she was matched will receive the tokens that she passed.

Each participant will therefore receive two groups of tokens, one based on her own decision to hold tokens and one based on the decision of another random participant to pass tokens. The computer will ensure that the same two participants are not paired twice.

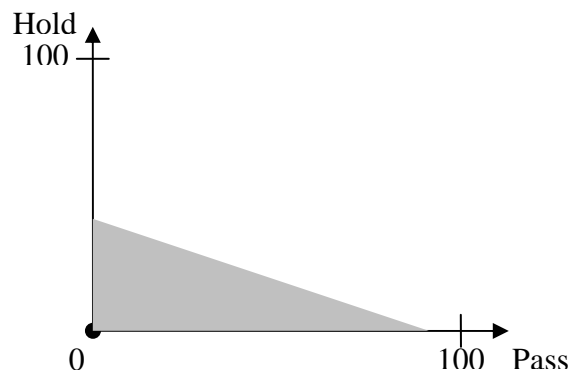
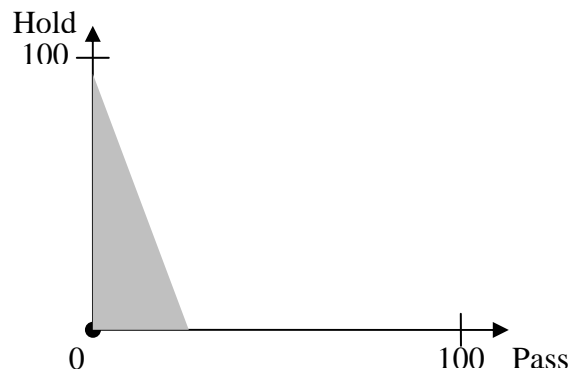
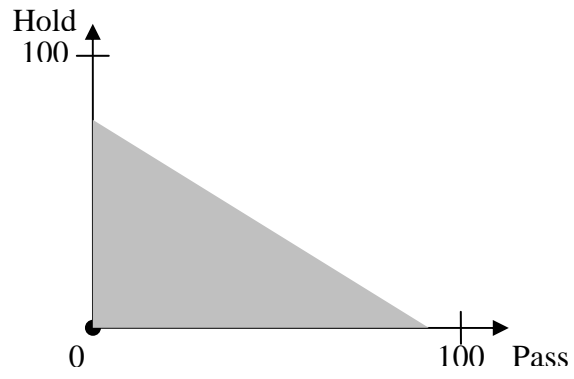
The round selected and your choice and your payment for the round will be recorded in the large window that appears at the center of the program dialog window. At the end of the experiment, the tokens will be converted into money. Each token will be worth $1/3$ Dollars. You will receive your payment as you leave the experiment.

Rules Your participation in the experiment and any information about your payoffs will be kept strictly confidential. Your payment-receipt and participant form are the only places in which your name and social security number are recorded.

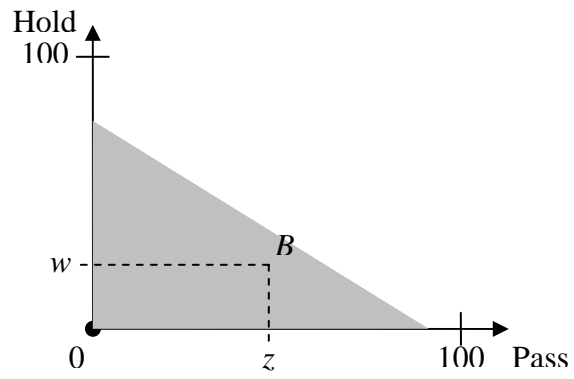
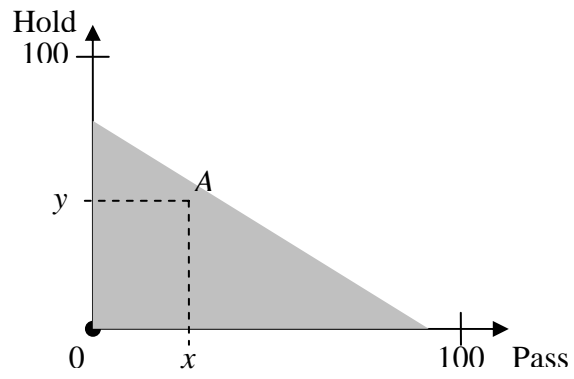
You will never be asked to reveal your identity to anyone during the course of the experiment. Neither the experimenters nor the other participants will be able to link you to any of your decisions. In order to keep your decisions private, please do not reveal your choices to any other participant.

Please do not talk with anyone during the experiment. We ask everyone to remain silent until the end of the last round. If there are no further questions, you are ready to start. An instructor will approach your desk and activate your program.

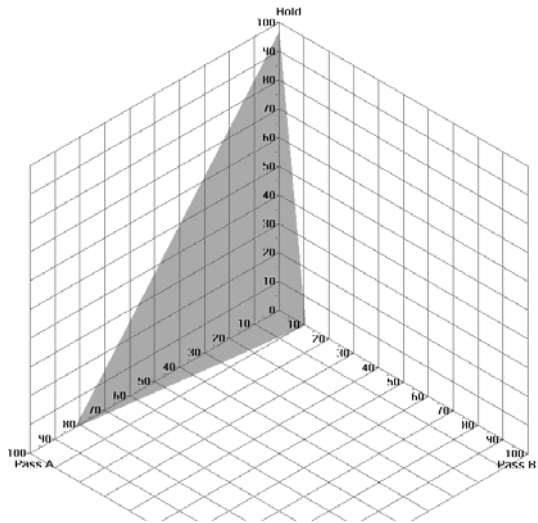
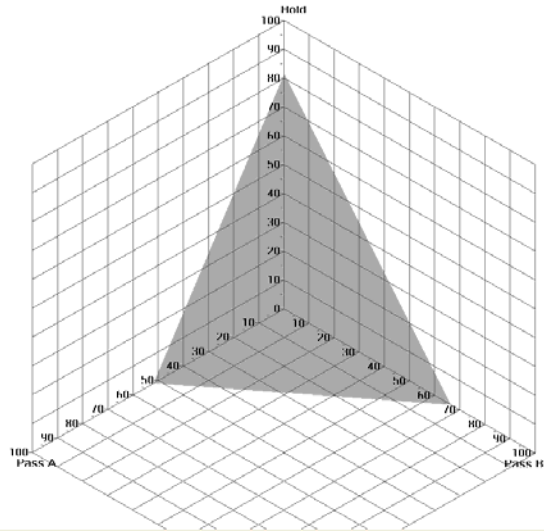
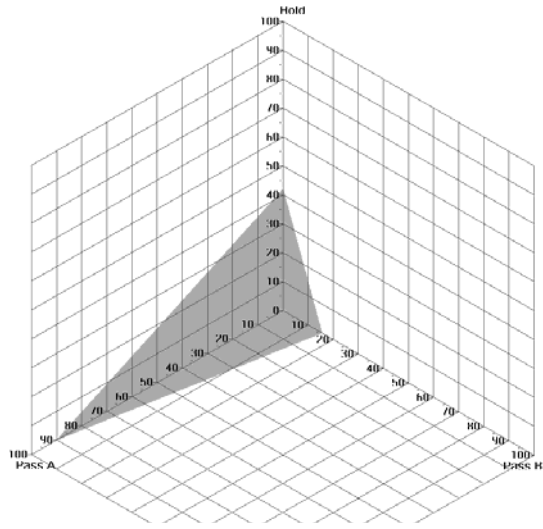
Attachment 1



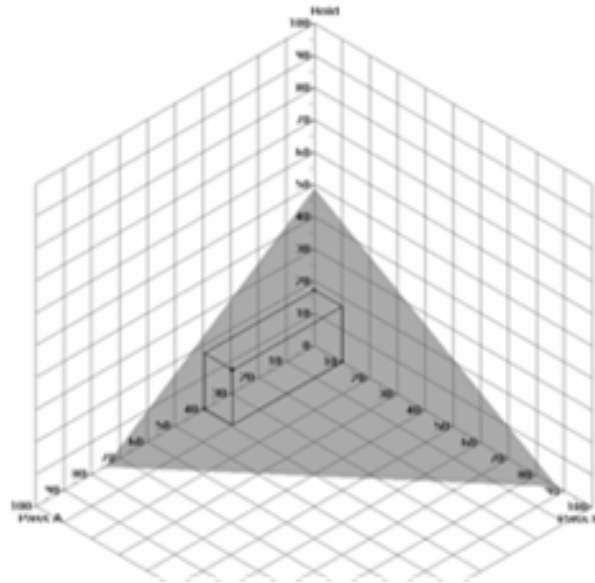
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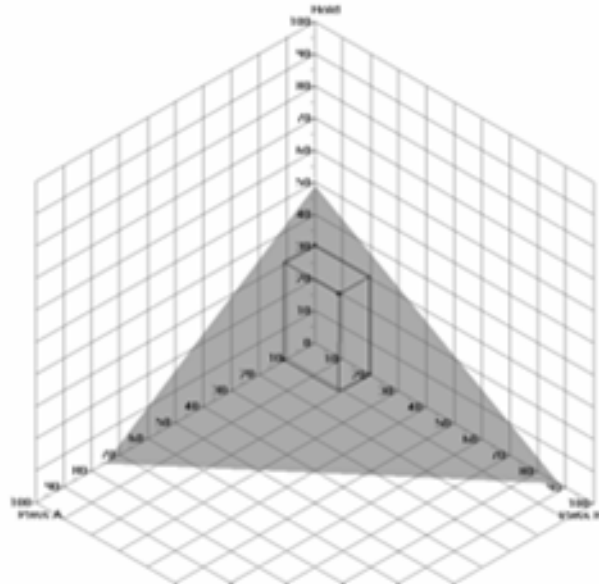
Attachment 3



Attachment 4

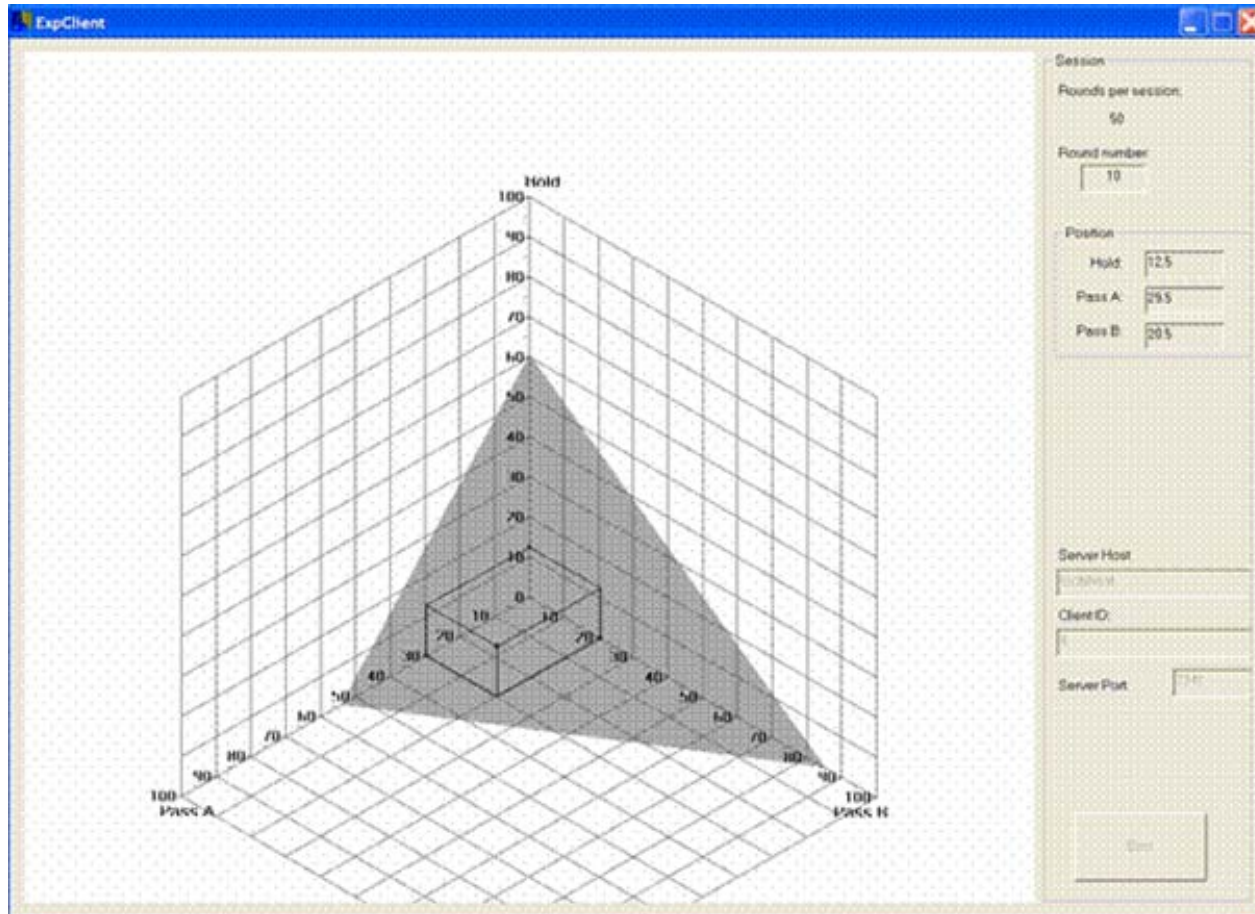


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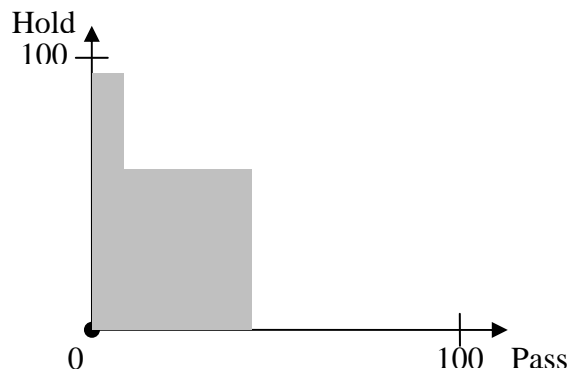
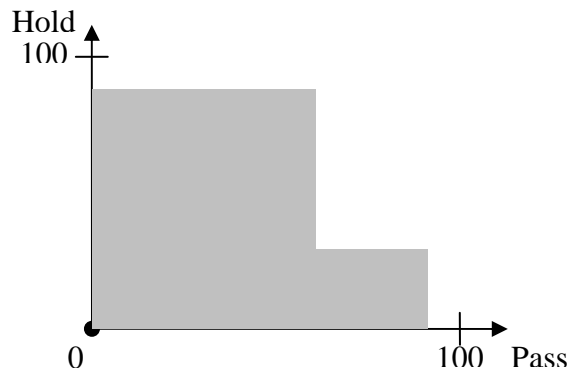
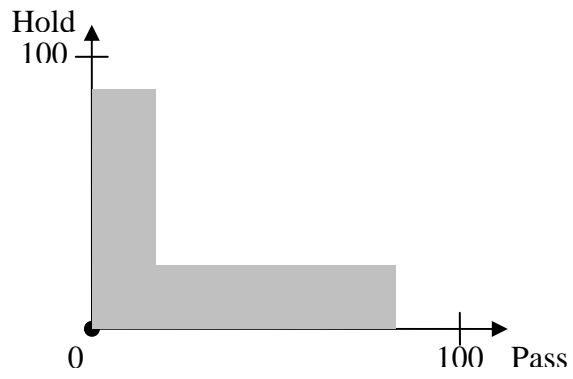


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Attachment 5



Attachment 6



Attachment 7

