**name: date: block:**

**Contracts and Purpose Statements**

1. **Write the contract and purpose statement** for a function named **two-by-two** which, given an image, produces four copies of the image in a two-by-two-square

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1. **Write the contract and purpose statement** for a function named **counterchange** which, given two images, produces a two-by-two square with the first image in top-left and bottom-right positions, and the second image in top-right and bottom-left positions.

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1. **Write the contract and purpose statement** for a function named **copies-beside** that takes in a number and an image, and produces that many copies of the image side by side.

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1. **Write the contract and purpose statement** for a function named **pinwheel** that takes in a picture and produces four copies of it in a square so that each picture is rotated 90 degrees.

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1. **Write the contract and purpose statement** for a function named **checkerboard** that produces a *2x2* square checkerboard in colors specified by the function caller. Each square should be 20 pixels on a side.

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1. **Write the contract and purpose statement** for the following problem: **Design** a program named **bullseye** which produces a “bull’s eye” style target with two rings. It takes in two numbers indicating the radii of the outer ring and the inner disk and two strings representing the colors of the out ring and the color of the inner disk.

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1. **Write the contract and purpose statement** for the following problem: **Design** a program named **dot-grid** which expects two numbers (the width and height of the grid, respectively) and produces a rectangular grid of radius-5 circular blue dots.

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