| Name: | Date: | Period: |
| :--- | :--- | :--- |

## Lab09: Chasing Points

- Initialize four points $P_{1}, P_{2}, P_{3}$, and $P_{4}$.

$$
\begin{aligned}
& P_{1}=\left(x_{1}, y_{1}\right)=(0.0,0.0) \\
& P_{2}=\left(x_{2}, y_{2}\right)=(1.0,0.0) \\
& P_{3}=\left(x_{3}, y_{3}\right)=(1.0,1.0) \\
& P_{4}=\left(x_{4}, y_{4}\right)=(0.0,1.0)
\end{aligned}
$$

- Repeat:
- Each point moves $10 \%$ of the way toward its nearest clockwise neighbor.
- So, point $P_{1}$ moves toward $P_{2}$, and $P_{2}$ to $P_{3}$, and $P_{3}$ to $P_{4}$, and $P_{4}$ to $P_{1}$.
- Draw a line pixel-by-pixel between each pair of neighbors after each step.
- Stop when the points are sufficiently close together.
- Attach the image to this form. Use printer-friendly colors!


## Official Use Only

| Header: | Name | Correct Date | Program Description |
| :--- | :--- | :--- | :--- |
| Style: | Comments | Variable Names | Modular |
| Data Structures: | Obvious | General | Lean |
| Algorithm: | Clear | Correct | Efficient |
| Scoring: | Raw | Late |  |

