

CSC 240

Computer Graphics

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Fall 2016
Smith College

Outline: 9/21

- Flood Fill
- Sweep Fill

Spinelli Center:
Review Session tonight!
Linear Equations
7-9pm, Wright 238
(extra credit: pick up slip)

Admin: Office Hours

Monday 4-5pm (Ford 015)
Tuesday 4-5pm (Ford 346)

TA hours Sun-Tues:
7:30-9:30pm (241 Ford)

HW 2 due Tuesday
by midnight (**next week**)

Laptops still not here...

Poll Everywhere

Do we need to modify this polygon algorithm to account for y increasing as we go down the screen?



When poll is active, respond at **PollEv.com/saramathieso692**



Text **SARAMATHIESO692** to **22333** once to join

yes

75%

no

2%

it depends

23%

Potentially all correct. If we stick with regular polygons, the answer is “no”, since we have symmetry about the x-axis. However, if we want to create more irregular shapes, the answer is “yes”, since we drawing points clockwise vs. counter-clockwise will result in a different configuration of the points.

0% 10% 20% 30% 40% 50% 60%

If the center of the regular polygon is at (0,50) with radius 100, where should the initial point be located according to this algorithm?



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(0,150) 6%

(0,0)

(100,50) 87%

(100,150) 6%

0% 10% 20% 30% 40% 50% 60% 70%

Would such a polygon be entirely visible on a screen?



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yes

2%

no



98%

0%

15%

30%

45%

60%

75%

Homework 1

- **0/0** returns **NaN** (not a number)
- **n/0** returns **Infinity** for $n \neq 0$

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- **0/0** returns **NaN** (not a number)
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- **for x in range(x1,x2):**
 y += m
 y = Math.round(y)
 fill (x,y)

What if $m = 0.2$?

Timer Demo

```
<!DOCTYPE html>
<html>
<head>
<title>Timer Demo</title>
<script>
    var canvas, context, time = 150, timer;
    // generate a random color
    function getRandomColor() {
        var letters = '0123456789ABCDEF';
        var color = '#';
        for (var i = 0; i < 6; i++ ) {
            color += letters[Math.floor(Math.random() * 16)];
        }
        return color;
    }
    function randomSquare(){
        // change square color at "time" intervals
        context.fillStyle = getRandomColor();
        context.fillRect(0,0,100,100);
    }
    function init() {
        canvas = document.getElementById('canvas');
        context = canvas.getContext('2d');
        timer = setInterval(randomSquare, time)
    }
</script>
</head>
<body onload="init()">
    <canvas id="canvas" width="450" height="290"></canvas>
</body>
</html>
```

Pair-programming

- Option on *some* assignments (Homework 2 included)

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- Work on the code only together (one person shouldn't go ahead and then “catch the other person up”)
- Switch “driver” every 30 min
- One computer for coding (other computer could have instructions, stack overflow, etc)