

## Installation Directions

### Items Needed:

- Paint: We recommend high-performance water-based traffic paint with anti-slip additive. Paint colors are up to you! Many groups use two general colors, one for the fraction side of the court and one for the decimal side of the court, and then use shades of each color for the different arcs.
- Material to outline Fraction Ball arcs: arcs can be made through the placement of string or rope.
- Number stencils
- Measurement tool. We suggest a tape measure that can reach up to 25'.
- Chalk to map out arcs.

### Steps:

- Locate the end of the 3-point line. This will be at either end of the court, near one of the four corners.
- For the half of the court with increments of  $\frac{1}{4}$  or .25:
  - Measure the distance between the end of the 3-point line and the middle of the basketball hoop. On a standard-size basketball court, the 3-point line is 22' from the basket on both sides, and 23'9" from the basket in the center.
  - Divide your measurement by 3. This number will be the distance between each arc you create! Note: On a standard-size basketball court, this number will be 7'3".
  - Go back to the side of the 3-point line and measure to your first arc using the distance you found in the previous step. Mark that spot!
  - Repeat the previous step using the new spot you found to create your next arc. Mark that spot!
  - Repeat one more time!
  - Repeat all steps on the other side of the basket.
  - It's time to connect your arcs! Anchor your rope on the baseline right under the middle of the basket. Trace the arc shape with the rope, marking a line with chalk as you go. This will create a semi-circle. Repeat for the other marks. Once completed, you will have 3 smaller arcs within the original 3-point arc.
  - Once each arc is mapped out, it's time to paint! See attached example.
  - Using your pre-selected paint colors, paint the court according to the color scheme you have chosen. You can use the attached example for inspiration if needed.
  - Once the arcs have dried, free-hand or use stencils to paint on your fractions and decimals. Starting at the center of the smallest arc, paint the value of that area in decimals:
    - Edge of arc 1: .25
    - Edge of arc 2: .50
    - Edge of arc 3: .75
  - Repeat this step on the other side of the basket, but using fractions!

- Edge of arc 1:  $\frac{1}{4}$
  - Edge of arc 2:  $\frac{1}{2}$
  - Edge of arc 3:  $\frac{3}{4}$
  - 3-point edge:  $\frac{4}{4}$
- For the half of the court with increments of  $\frac{1}{3}$  or .3:
  - Measure the distance between the end of the 3-point line and the middle of the basketball hoop. On a standard-size basketball court, the 3-point line is 22' from the basket on both sides, and 23'9" from the basket in the center.
  - Divide your measurement by 2. This number will be the distance between each arc you create! Note: On a standard-size basketball court, this number will be 11'
  - Go back to the side of the 3-point line and measure to your first arc using the distance you found in the previous step. Mark that spot!
  - Repeat the previous step using the new spot you found to create your next arc. Mark that spot!
  - Repeat all steps on the other side of the basket.
  - It's time to connect your arcs! Anchor your rope on the baseline right under the middle of the basket. Trace the arc shape with the rope, marking a line with chalk as you go. This will create a semi-circle. Repeat for the other marks. Once completed, you will have 2 smaller arcs within the original 3-point arc.
  - Once the arcs have dried, free-hand or use stencils to paint on your fractions and decimals. Starting at the center of the smallest arc, paint the value of that area in decimals:
    - Edge of arc 1: .3
    - Edge of arc 2: .6
    - 3-point edge: 1
  - Repeat this step on the other side of the basket, but using fractions!
    - Edge of arc 1:  $\frac{1}{3}$
    - Edge of arc 2:  $\frac{2}{3}$
    - Edge of arc 3:  $\frac{3}{3}$
- Finally, use the provided life-size number line stencil to trace and paint your number line.

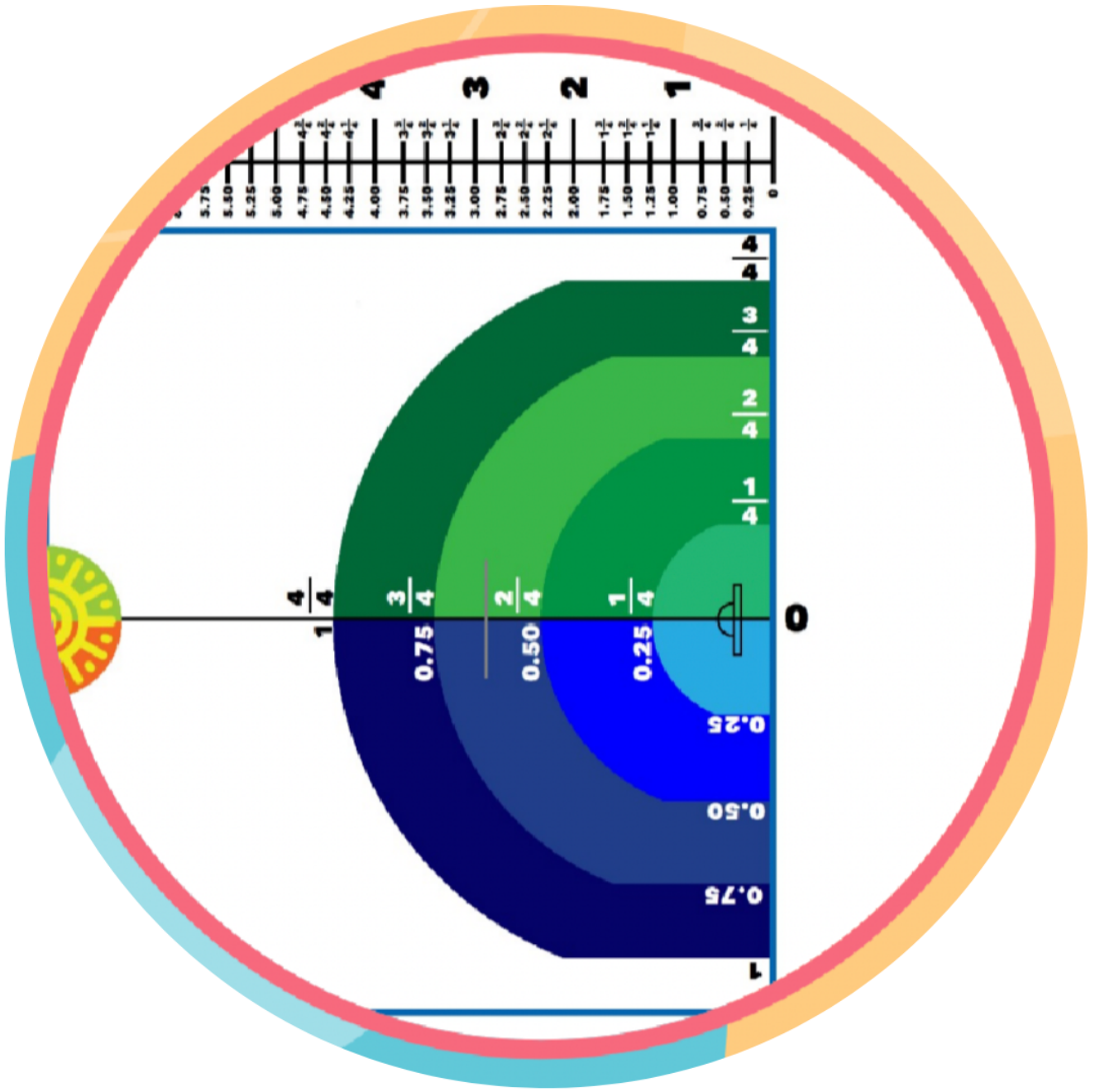


Photo by: University of California Irvine