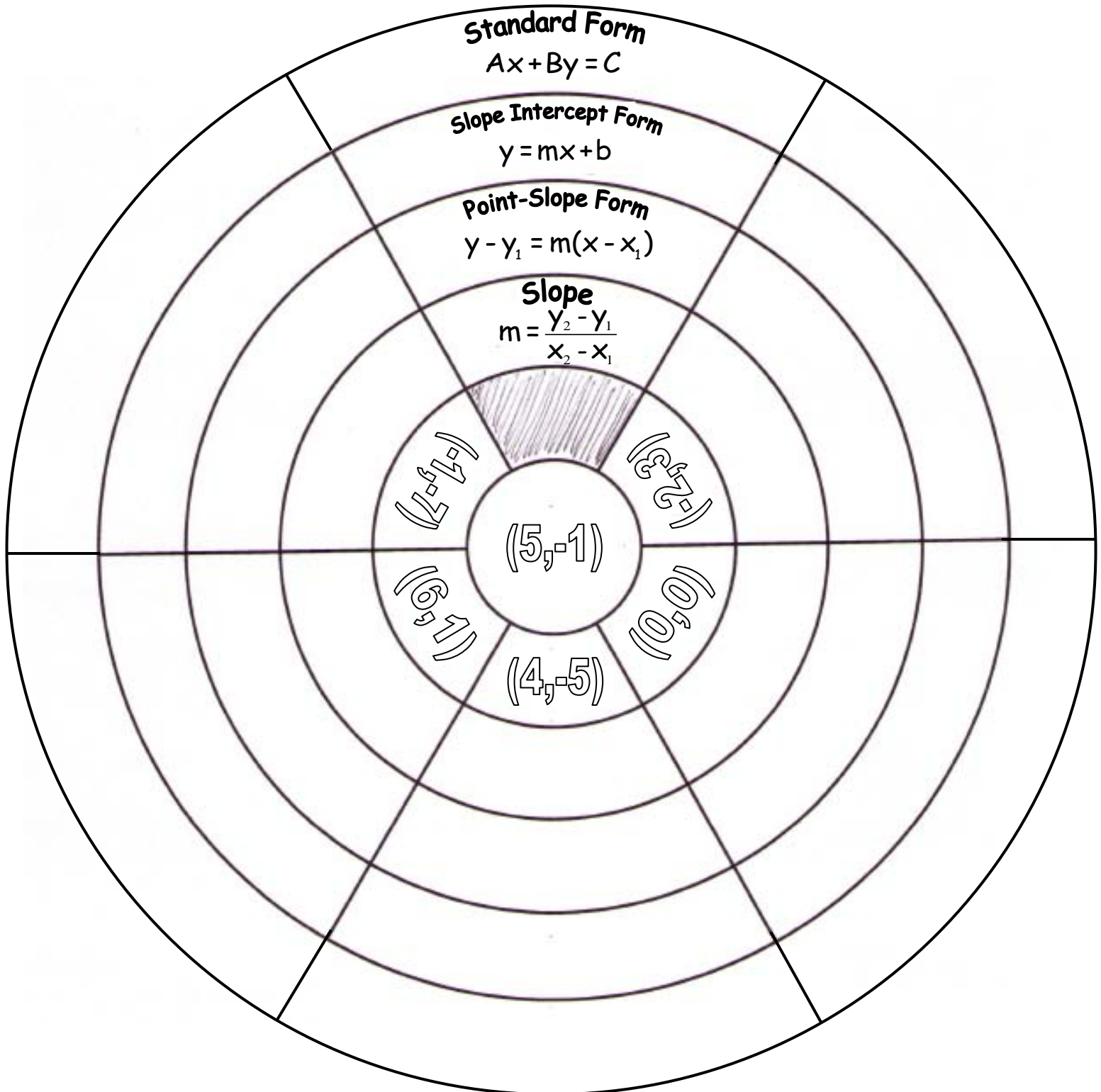# Writing the Equations of Lines Bull's Eye

In the center of the Bull's Eye there is a coordinate pair. In the first ring there is another coordinate pair. In the following ring, find the slope of the line containing the two points. In the next ring, write the point-slope form of the line containing the two points. In the next ring, write the slope-intercept form of the line containing the two points and in the last ring, write the standard form of the line containing the two points.

Standard Form
$$Ax + By = C$$

Slope Intercept Form
$$y = mx + b$$

Point-Slope Form
$$y - y_1 = m(x - x_1)$$

Slope
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$(5, -1)$

$(-1, -7)$

$(-2, 3)$

$(6, 1)$

$(0, 0)$

$(4, -5)$

Determine if Lines are Parallel or Perpendicular Bull's Eye

In the first ring there is a linear equation. In the next ring, write the linear equation in slope-intercept form. In the next ring, find the slope of a parallel line and perpendicular line to the given linear equation. In the next ring, write the outer linear equation in slope-intercept form and in the last ring, determine if the outer linear equation is parallel, perpendicular, or neither to the inner linear equation.

Parallel, Perpendicular, or Neither

To this Equation

Slope

$$m_{\parallel} = ? \qquad m_{\perp} = ?$$

Slope Intercept Form

$$y = mx + b$$

$$\frac{x}{2} - y = 7$$

$$-12x + 3y = 13$$

$$x = -4y - 13$$

$$2x + y = 8$$

$$x + 6y = 12$$

$$4x + 6y = 5$$

$$-4x + 3y = 14$$

$$-3y = 2x + 5$$

$$3(x - 2) = -y - 4$$

$$9x + 12y = 6$$