

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Perpendicular Line Through a Point

Write the equation of the line through the given point that is perpendicular to the given line. Use $y = mx + b$ when possible, and $x = c$ for a vertical answer.

1. Through $(-2, 2)$, write the perpendicular line.

Given line: $y = -\frac{6}{5}x - 6$

Point: $(-2, 2)$

Equation: _____

2. Through $(-4, 3)$, write the perpendicular line.

Given line: $y = -\frac{11}{9}x + 1$

Point: $(-4, 3)$

Equation: _____

3. Through $(3, 4)$, write the perpendicular line.

Given line: $y = \frac{5}{4}x + 12$

Point: $(3, 4)$

Equation: _____

4. Through $(4, 0)$, write the perpendicular line.

Given line: $y = \frac{1}{2}x + 5$

Point: $(4, 0)$

Equation: _____

5. Through $(2, -5)$, write the perpendicular line.

Given line: $3x - 8y = -88$

Point: $(2, -5)$

Equation: _____

6. Through $(-2, 5)$, write the perpendicular line.

Given line: $5x + 4y = 20$

Point: $(-2, 5)$

Equation: _____

7. Through $(-3, 0)$, write the perpendicular line.

Given line: $y = 4$

Point: $(-3, 0)$

Equation: _____

8. Through $(3, 4)$, write the perpendicular line.

Given line: $x = -3$

Point: $(3, 4)$

Equation: _____