Geometry
Chapter 13

Name _____
Per _____

Writing Equations of Lines

Write an equation of a straight line that meets the following conditions:

1. A line that passes through the points (2, -6) and (-3, 4).

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2. A line through the point (4, 6) and perpendicular to the line $3x + 4y = 6$.

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3. A line with a slope of $-\frac{2}{3}$ and that passes through the point (6, -4).

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4. A line through the origin and perpendicular to the line $x - 3y = -9$.

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5. A line of y-intercept 4, and slope $-\frac{2}{7}$. _____

6. A line parallel to $-2x + y = 6$ and through the point (-3, 8).

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7. A line perpendicular to the line through (2, -3) and (6, 4) with the same y-intercept as the line $3x - 4y = 24$. _____

8. A line through the points (6, -8) and (-4, 3). _____

9. A line of $m = -\frac{3}{5}$ and $b = 6$. _____

10. A line parallel to $-3x + y = 10$ with $b = 7$. _____

11. A line perpendicular to $-4x + y = -6$ and the same y-intercept as $2x - y = 4$.

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12. A line through the point (-2, 6) and parallel to the line $5x - 4y = 20$.

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13. A line that is the perpendicular bisector of the points (8, 4) and (14, 10).

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