

Isosceles Triangles Problems: Find the value of each variable.

<p>1.</p>	<p>2.</p>	<p>3.</p>	<p>4. Do in notebook. You need a system of two equations.</p>
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Linear Functions. Do work for 7-9 in your notebook.

<p>5. What is the slope of the line that is parallel to $y = 3x - 7$?</p>	<p>6. What is the slope of the line that is perpendicular to $y = 3x - 7$?</p>
<p>7. Find the equation of the line through $(3, 4)$ and $(9, 0)$.</p>	<p>8. Find the equation of the line through $(-1, 3)$ and $(2, 3)$.</p>
<p>9. Find the equation of the line that passes through $(5, -1)$ and is perpendicular to $y = \frac{5}{2}x + 3$. Show a graph of both lines.</p>	

For each equation, find the y -value by substituting in the given x -value then simplifying.

<p>10. $y = \frac{1}{2}x + 3$</p> <p>a) $x = 10$</p> <p>b) $x = -5$</p> <p>c) $x = \frac{-2}{3}$</p>	<p>11. $y = 3x^2$</p> <p>a) $x = -5$</p> <p>b) $x = \frac{2}{7}$</p> <p>c) $x = \sqrt{5}$</p>	<p>12. $y = (x + 2)(x - 3)$</p> <p>a) $x = 4$</p> <p>b) $x = -2$</p> <p>c) $x = 3$</p> <p>d) $x = \frac{1}{2}$</p>	<p>13. $y = (x + 4)^2$</p> <p>a) $x = -14$</p> <p>b) $x = -4$</p> <p>c) $x = \frac{-7}{4}$</p>
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For each equation, find the x -value by substituting in the given y -value and then solving the equation for x .

<p>14. $y = 4x + 3$</p> <p>a) $y = 23$</p> <p>b) $y = 0$</p> <p>c) $y = -13$</p>	<p>15. $y = \frac{2}{3}x + 1$</p> <p>a) $y = 5$</p> <p>b) $y = 0$</p>	<p>16. $y = (x + 4)(x - 5)$</p> <p>a) $y = 0$ *</p> <p>* Find both answers</p>	<p>17. $y = (x + 3)^2$</p> <p>a) $y = 0$</p> <p>b) $y = 25$ *</p> <p>* Find both answers</p>
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