

Name: _____

Date: _____

Period: _____

Absolute Value Functions Coloring

<p>1) Determine the vertex of the following function</p> $y = 2 x - 4 + 11$ <p>--if (4, 11) color the frogs light green</p> <p>--if (-4, 11) color the frogs brown</p>	<p>2) Determine the range of the following function</p> $y = 2 x - 4 + 11$ <p>--if $y \geq 11$ color the trunk of the tree and cattail tops brown</p> <p>--if $y \leq 11$ color the trunk of the tree and cattail tops black</p>	<p>3) Determine the vertex of the following function</p> $y = \frac{1}{2} x + 3 - 7$ <p>--if (3, -7) color the tops of the trees and the cattail leaves light green</p> <p>--if (-3, -7) color the tops of the trees and the cattail leaves dark green</p>
<p>4) Determine the concavity of the following function</p> $y = \frac{1}{2} x + 3 - 7$ <p>--if up color the lily pads dark green</p> <p>--if down color the lily pads light green</p>	<p>5) Determine the domain of the following function</p> $y = -3 x + 4 + 1$ <p>--if all real numbers color eeyore's stomach and nose purple</p> <p>--if $x < -4$ color eeyore's stomach and nose gray</p>	<p>6) Determine the concavity of the following function</p> $y = -3 x + 4 + 1$ <p>--if up color eeyore's tail bow red</p> <p>--if down color eeyore's tail bow pink</p>
<p>7) Determine the vertex of the following function</p> $y = -3 x + 4 + 1$ <p>--if (-4, 1) color eeyore's body gray</p> <p>--if (4, -1) color eeyore's body purple</p>	<p>8) Determine the range of the following function</p> $y = -\frac{1}{3} x - 2 - 9$ <p>--if $y \leq -9$ then color the bank brown</p> <p>--if $y \geq -9$ then color the bank black</p>	<p>9) Determine the vertex of the following function</p> $y = -\frac{1}{3} x - 2 - 9$ <p>--if (2, -9) color the grass light green</p> <p>--if (-2, -9) color the grass dark green</p>
<p>10) Write an equation that translates the parent function 4 units to the left and 8 units down</p> <p>--if $y = x + 4 - 8$ then color the water dark blue</p> <p>--if $y = x - 4 - 8$ then color the water light blue</p>	<p>11) Write an equation that translates the parent function 5 units to the right and 6 units down</p> <p>--if $y = x + 5 - 6$ then color Pooh's shirt and tongue pink</p> <p>--if $y = x - 5 - 6$ then color Pooh's shirt and tongue red</p>	<p>12) Write an equation that translates the parent function 11 units to the left and 3 units up</p> <p>--if $y = x + 11 + 3$ then color Pooh's body yellow</p> <p>--if $y = x + 11 - 3$ then color Pooh's body orange</p>
<p>13) Write an equation that is concave down, 8 units to the right and 4 units down</p> <p>--if $y = - x - 8 - 4$ then color the sky light blue</p> <p>--if $y = x - 8 - 4$ then color the sky dark blue</p>	<p>14) Write an equation that is concave up, 12 units to the left and 9 units up</p> <p>--if $y = x + 12 - 9$ then color Piglet's shirt red</p> <p>--if $y = x + 12 + 9$ then color Piglet's shirt dark pink</p>	<p>15) Write an equation that is concave down, 2 units to the right and 6 units up</p> <p>--if $y = - x + 2 + 6$ then color Piglet's body orange</p> <p>--if $y = - x - 2 + 6$ then color Piglet's body light pink</p>

