

Solving Equations with One, Many or No Solutions

Name: _____

Solve each equation. Draw the corresponding facial feature for a given solution on the back of this sheet.

Draw a circle on the back of this sheet to give you a blank face

<p>1) $2x - 4(x - 1) = 10$</p> <ul style="list-style-type: none"> $x = -3$; Open mouth smile $x = 3$; Closed mouth smile No Solution; Closed mouth frown Many Solutions; Yawning Mouth 	<p>2) $4x + \frac{1}{2}(8x + 6) = 2(4x + 3)$</p> <ul style="list-style-type: none"> $x = 0$; Eyeballs looking up $x = -4$; Eyeballs looking down No Solution; Crossed eyes Many Solutions; Closed eyes 	<p>3) $6x + 8 = 12x - 4$</p> <ul style="list-style-type: none"> $x = \frac{2}{3}$; Thick eyebrows $x = 2$; Thin eyebrows No Solution; Thin eyelashes Many Solutions; Thick eyelashes
<p>4) $3x + 5 = 2x + 1$</p> <ul style="list-style-type: none"> $x = 4$; Thin mustache $x = -4$; Thick mustache No Solution; Goatee Many Solutions; Beard 	<p>5) $2(x + 4) = 2x + 5$</p> <ul style="list-style-type: none"> $x = 1$; Big ears with earrings $x = \frac{4}{9}$; Small ears with earrings No Solution; Small ears Many Solutions; Big ears 	<p>6) $6 + 2(x - 5) + 4x = 44$</p> <ul style="list-style-type: none"> $x = 10$; Face wrinkles $x = 8$; Dimples No Solution; Mole on forehead Many Solutions; Mole on chin
<p>7) $4(x + 3) - 4 = 8\left(\frac{1}{2}x + 1\right)$</p> <ul style="list-style-type: none"> $x = 12$; Crooked nose $x = 0$; Big nose No Solution; Small nose Many Solutions; Pointy nose 	<p>8) $2 + 3(x - 5) = 5$</p> <ul style="list-style-type: none"> $x = \frac{3}{8}$; Long hair $x = 6$; Short, curly hair No Solution; Afro Many Solutions; Pigtails 	<p>9) $3x + 7x + 1 = 2(5x + 1) + 2$</p> <ul style="list-style-type: none"> $x = 1$; Turtleneck shirt $x = 12$; Shirt with long tie No Solution; Shirt with bowtie Many Solutions; V-neck shirt
<p>10) $3x + 1 = 3(x - 1) + 4$</p> <ul style="list-style-type: none"> $x = \frac{3}{4}$; Nose ring $x = 2$; Lightning bolt scar No Solution; Thick eyelashes Many Solutions; Thin eyelashes 	<p>11) $2(3x + 3) = 3(2x + 2)$</p> <ul style="list-style-type: none"> $x = 0$; Baseball hat $x = -2$; Cowboy hat No Solution; Tall hat Many Solutions; Top hat 	<p>12) $4(2x + 1) = 5x + 3x + 9$</p> <ul style="list-style-type: none"> $x = 5$; Scar on cheek $x = -5$; Neck scarf No Solution; Freckles Many Solutions; Forehead wrinkles