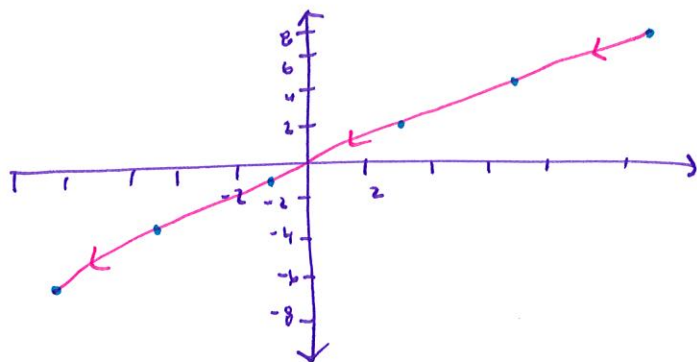


$$5. \quad x = 3 - 4t, \quad y = 2 - 3t$$



"randomly" chosen since no domain restrictions

t	x	y
-2	11	8
-1	7	5
0	3	2
1	-1	-1
2	-5	-4
3	-9	-7

if $x = 3 - 4t$ and $t = -\frac{1}{3}(y - 2)$, then:

$$x = 3 - 4\left(-\frac{1}{3}(y - 2)\right) = 3 - 4\left(-\frac{y}{3} + \frac{2}{3}\right) = 3 + \frac{4y}{3} - \frac{8}{3}$$

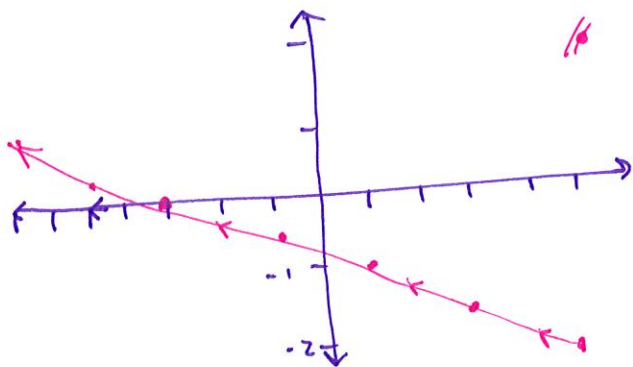
$$x = \frac{4y}{3} - \frac{1}{3}$$



$$y = \frac{3}{4}x - \frac{1}{4}$$

← we're able to express this one in terms of x since it's a function

$$6. \quad x = 1 - 2t, \quad y = \frac{1}{2}t - 1, \quad -2 \leq t \leq 4$$



t	x	y
-2	5	-2
-1	3	-1.5
0	1	-1
1	-1	-0.5
2	-3	0
3	-5	0.5
4	-7	1

if $y = \frac{1}{2}t - 1$ + $t = -\frac{1}{2}(x - 1)$, then:

$$y = \frac{1}{2}\left(-\frac{1}{2}(x - 1)\right) - 1 = \frac{1}{2}\left(-\frac{1}{2}x + \frac{1}{2}\right) - 1$$

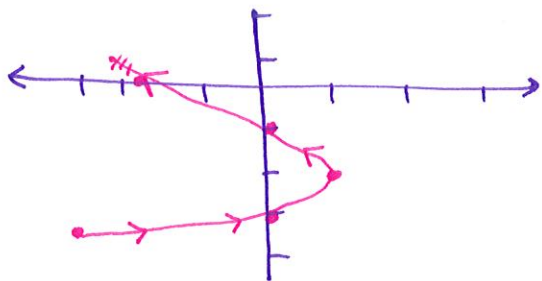
$$y = -\frac{1}{4}x + \frac{1}{4} - 1$$

$$y = -\frac{1}{4}x - \frac{3}{4}$$

$$7. \quad x = 1 - t^2$$

$$y = t - 2$$

$$-2 \leq t \leq 2$$



t	x	y
-2	-3	-4
-1	0	-3
0	1	-2
1	0	-1
2	-3	0

if $x = 1 - t^2$ + $t = y + 2$, then:

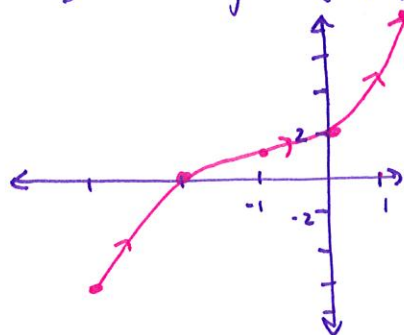
$$x = 1 - (y + 2)^2 = 1 - y^2 - 4y - 4$$

$$\boxed{x = -y^2 - 4y - 3}$$

$$8. \quad x = t - 1$$

$$y = t^3 + 1$$

$$-2 \leq t \leq 2$$

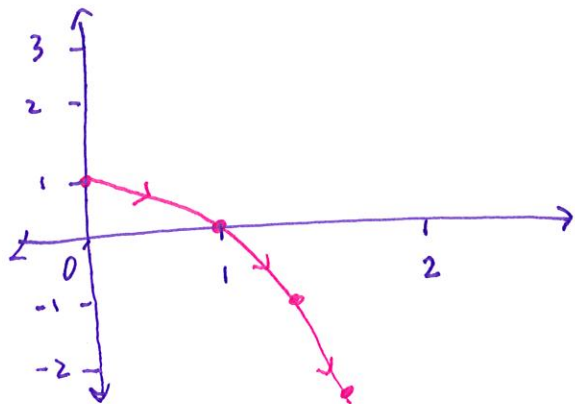


t	x	y
-2	-3	-7
-1	-2	0
0	-1	1
1	0	2
2	1	9

if $y = t^3 + 1$ + $t = x + 1$, then:

$$\boxed{y = (x + 1)^3 + 1}$$

q. $x = \sqrt{t}$, $y = 1 - t$

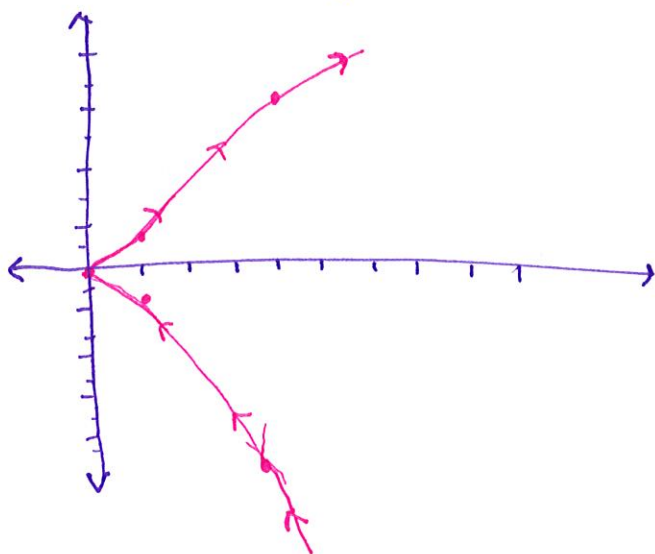


t	x	y
-2	-	3
-1	-	2
0	0	1
1	1	0
2	$\sqrt{2}$	-1
3	$\sqrt{3}$	-2

if $y = 1 - t$, and $t = x^2$, then:

$$y = 1 - x^2$$

q. $x = t^2$, $y = t^3$



t	x	y
-2	4	-8
-1	1	-1
0	0	0
1	1	1
2	4	8
3	9	27

if $x = t^2$ and $t = \sqrt[3]{y}$, then:

$$x = (\sqrt[3]{y})^2 = \cancel{y^{2/3}}$$

$$x = y^{2/3}$$