Bg 435 #1-3, 5-6, 9, 13-16

1a) $t = x - 1$

b) $t = \frac{x+1}{3}$

c) $t = \pm\sqrt{x}$

d) $t = x + 1$

2a) $y = (x-1)^2$

b) $y = \frac{2}{3}x + \frac{5}{3}$

c) $y = \pm\sqrt{x} + 3$

d) $y = \sqrt{4-(x+1)^2}$

GRAPH THEM

3a) $y = \frac{x+7}{2}$

b) $y = \pm\sqrt{x} + 1$

c) $y = \frac{2x-4}{3}$

d) $y = 2(x+2)^2$

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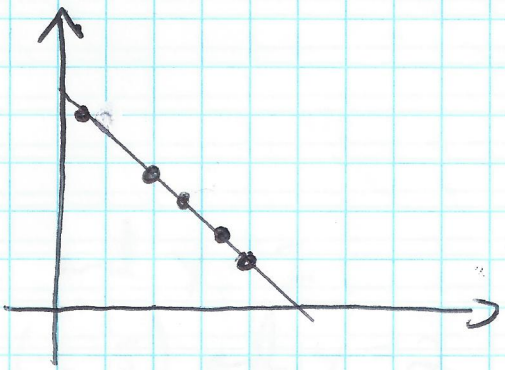
6) $x = -\frac{2}{3}t + 4$

$y = \frac{3}{5}t + 1$

$y = -\frac{9}{10}x + \frac{23}{5}$

$\frac{3/5}{-2/3}$

5)

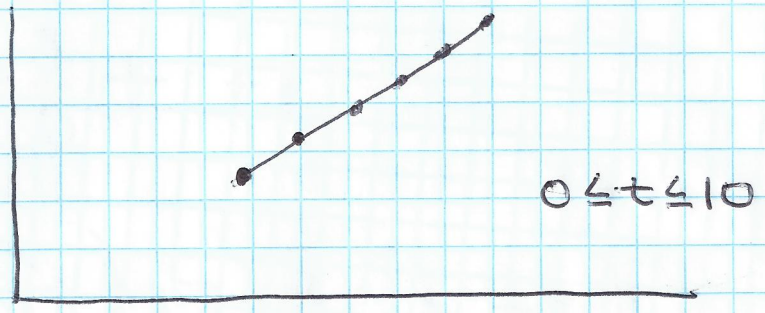


t	x	y
0	4	1
1	3.5	1.5
5	.5	4
3	2	2.8
2	2.6	2.2

BJ 435

9a) $x = 20 + 2t$ $\quad y = 5 + t$

b)



POINTS ARE LINEAR

c) $y = \frac{1}{2}x - 5$ $\quad x = 20 + 2(y-5)$ $\quad x - 20 = 2(y-5)$

$\frac{1}{2}x - 10 = y - 5$ $\quad \frac{1}{2}x - 5 = y$

d) SLOPE IN 9C IS RATIO OF

$$\frac{y \text{ slope}}{x \text{ slope}}$$ IN PARAMETRIC EQUATIONS

13) $x = t^2$ $\quad y = t$

14) a) TANKER A $\quad x = 18t$ and $y = 1$

TANKER B $\quad x = 22(t-5)$ and $y = 2$

b) VARIES

c) 27.5 AFTER LEAVING $\quad$ 495 MI. EAST OF CORPUS CRISTI

5) $x = -\frac{2}{3}t + 4$

$y = \frac{3}{5}t + 1$

$-\frac{3}{2}(x-4) = \frac{5}{3}(y-1)$

$-9(x-4) = 10(y-1)$

$-9x + 36 = 10y - 10$

$-9x + 46 = 10y$

$y = -9/10x + 4.6$