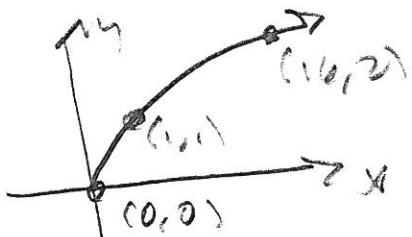


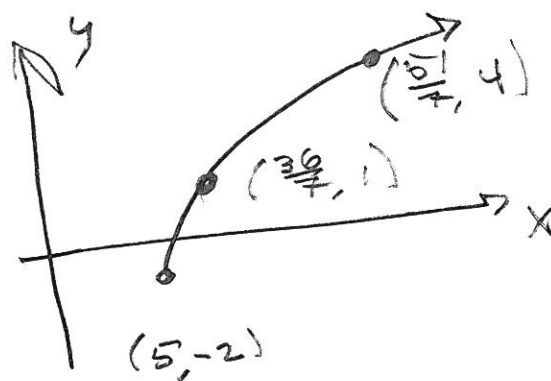
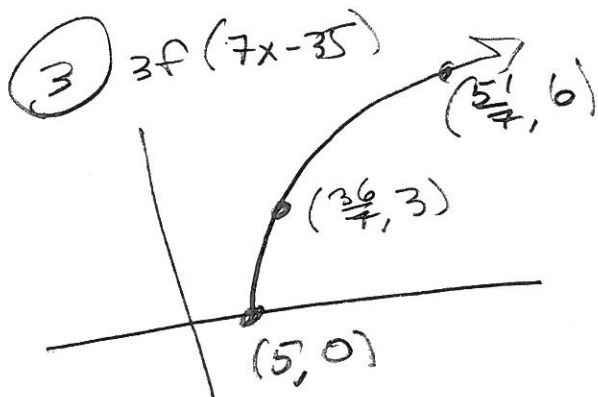
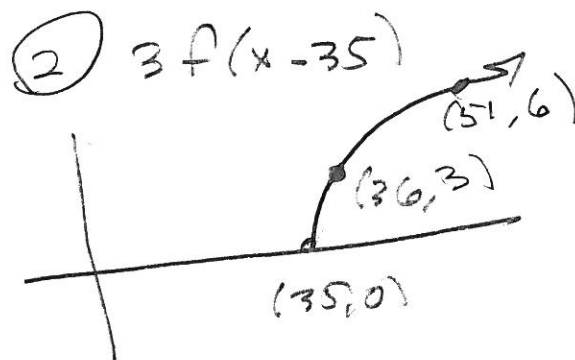
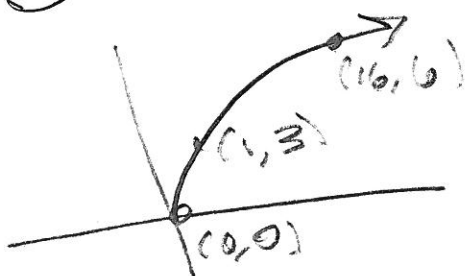
121 Writing Project #2

①  $g(x) = 3\sqrt[4]{7x-35} - 2$

②  $f(x) = \sqrt[4]{x}$



①  $3f(x) = 3\sqrt[4]{x}$

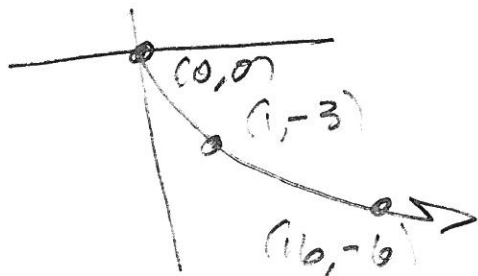


121 WP2

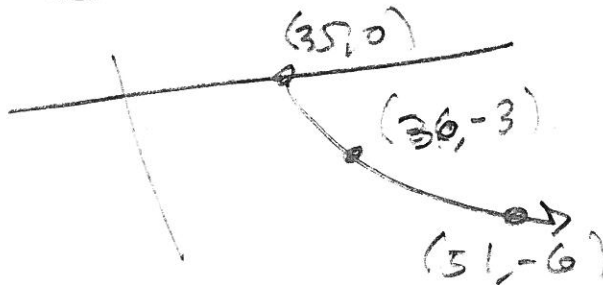
(2)  $g(x) = -3 \sqrt[4]{7x-35} + 2$

See #1 for  $f(x) = \sqrt[4]{x}$

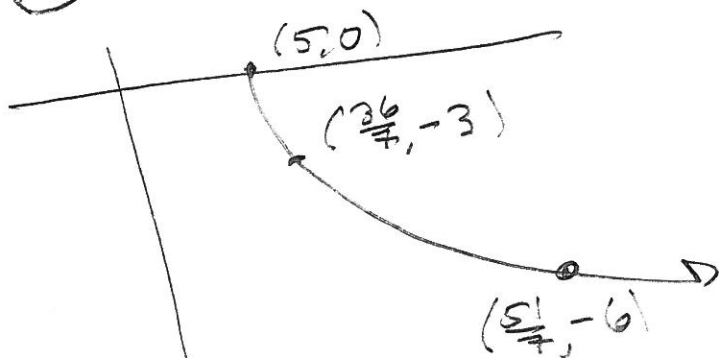
(1)  $-3f(x) = -3 \sqrt[4]{x}$



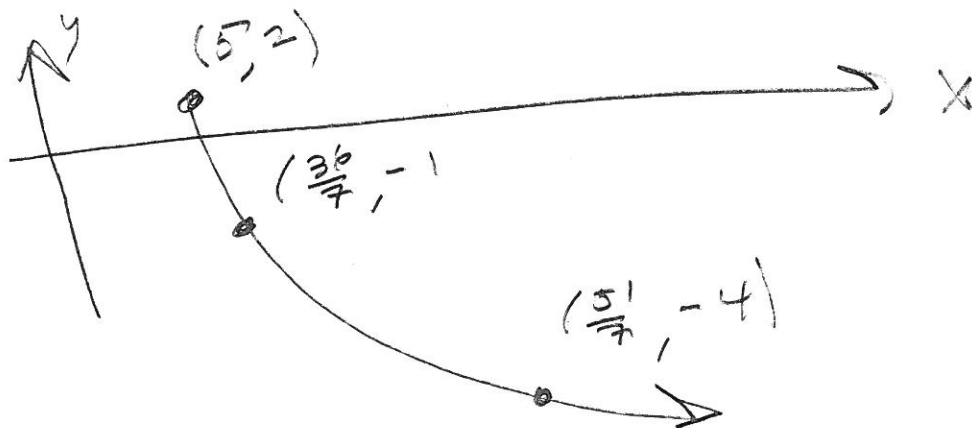
(2)  $-3f(x-35) = -3 \sqrt[4]{x-35}$



(3)  $-3f(7x-35) = -3 \sqrt[4]{7x-35}$



(4)  $-3f(7x-35) + 2 = -3 \sqrt[4]{7x-35} + 2$

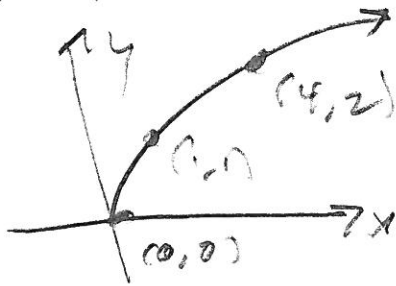


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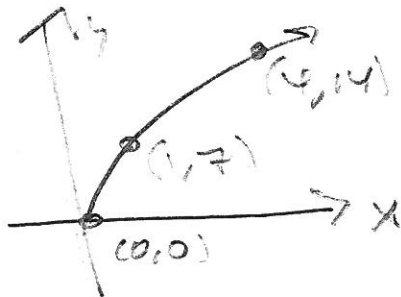
WP2

(3)  $g(x) = 7\sqrt{-5x-20} - 12$

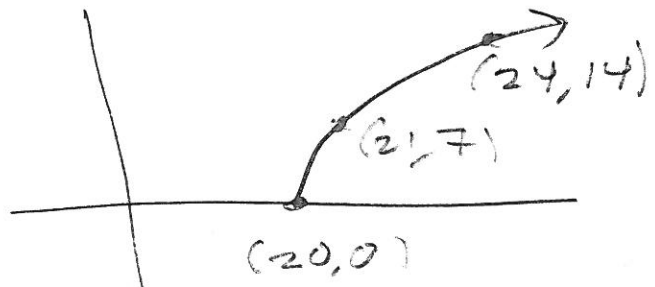
(0)  $f(x) = \sqrt{x}$



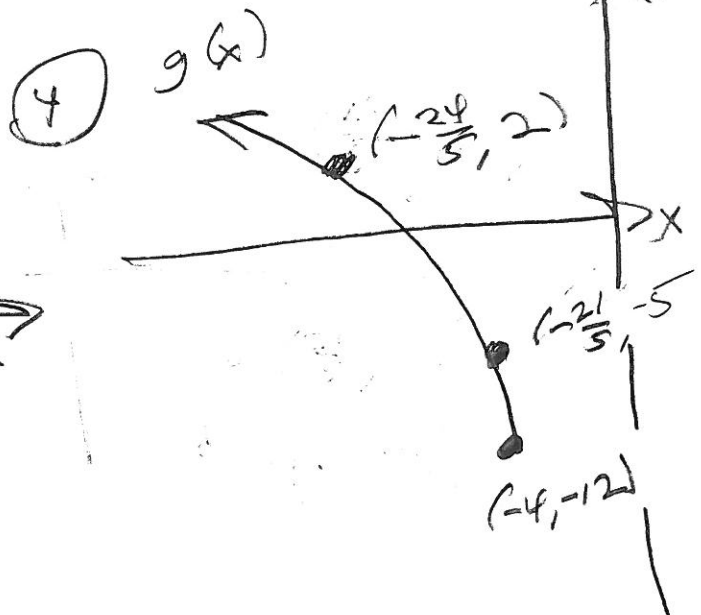
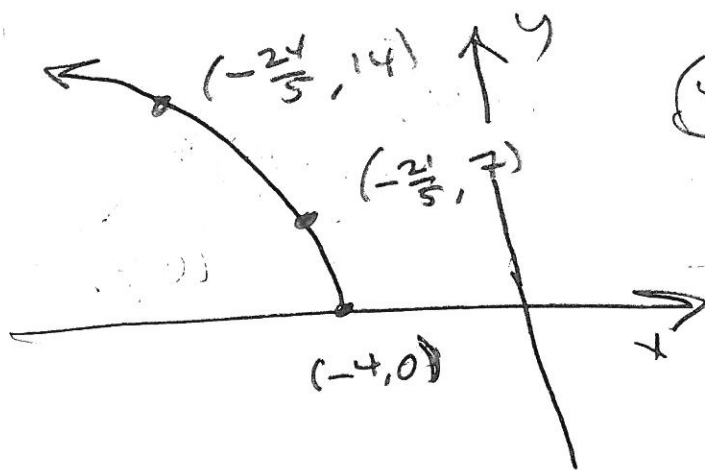
(1)  $7f(x) = 7\sqrt{x}$



(2)  $7f(x-20) = 7\sqrt{x-20}$

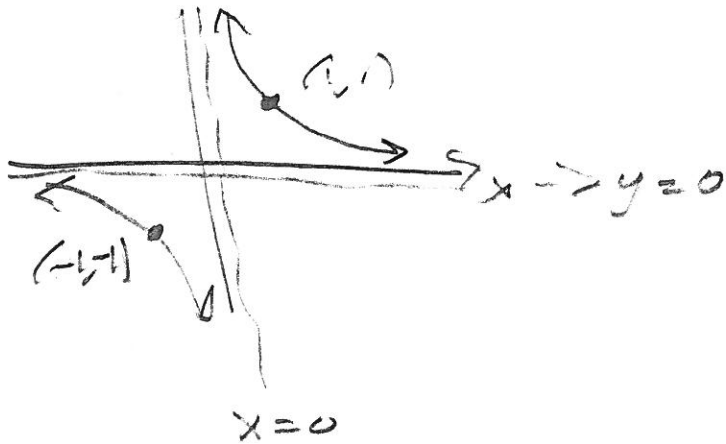


(3)  $7f(-5x-20) = 7\sqrt{-5x-20}$

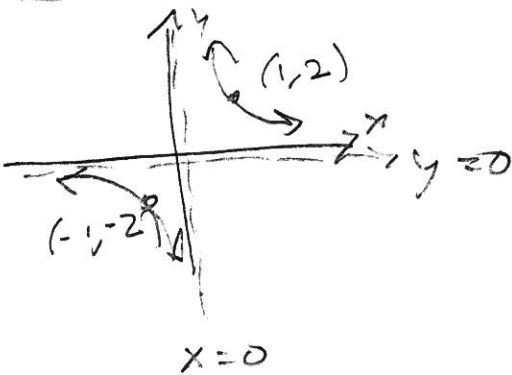


④  $g(x) = \frac{2}{(-3x+21)} - 5$

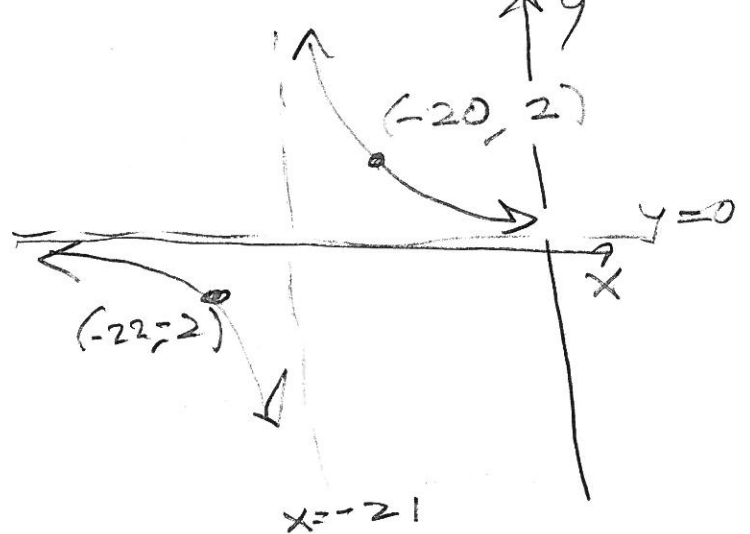
①  $f(x) = \frac{1}{x}$



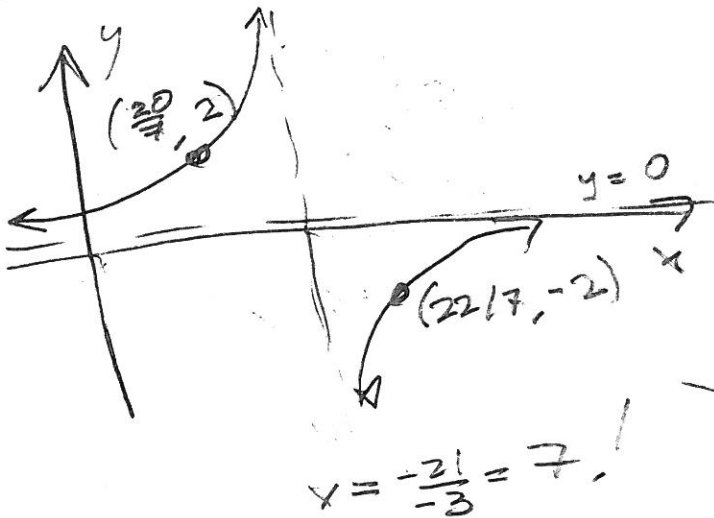
①  $2f(x) = \frac{2}{x}$



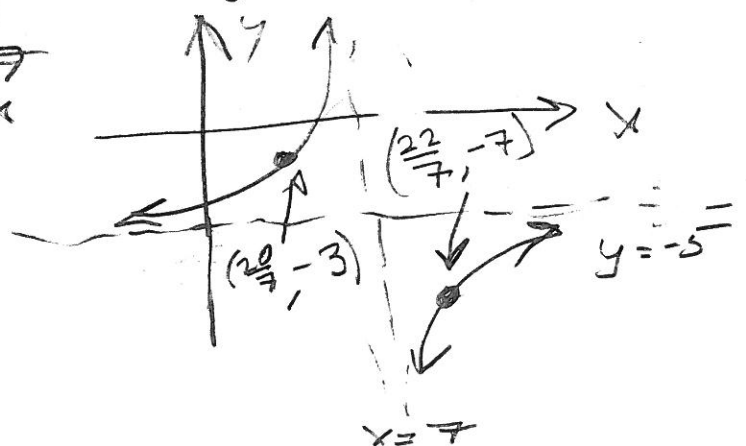
②  $2f(x+21) = \frac{2}{x+21}$



③  $2f(-3x+21) = \frac{2}{-3x+21}$



④  $g(x)$

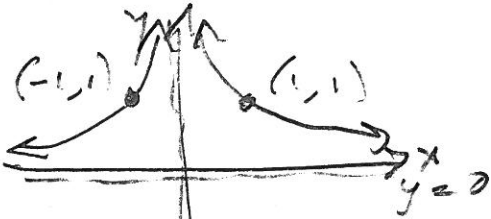


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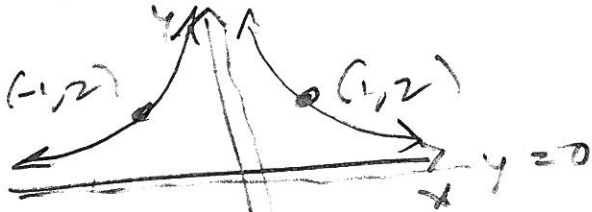
WP2

$$5) g(x) = \frac{2}{(-3x+2)^2} - 5$$

$$6) f(x) = \frac{1}{x^2}$$

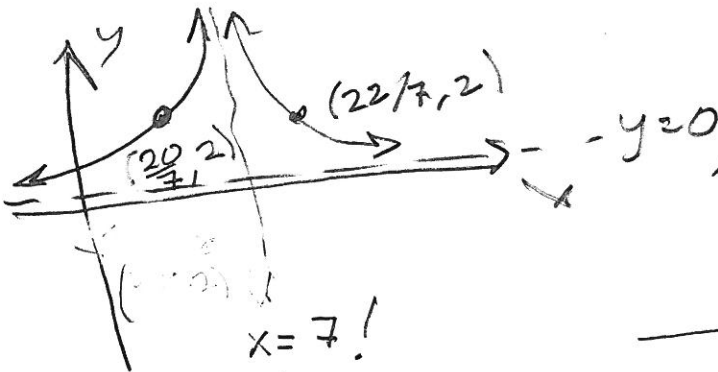


$$1) 2f(x) = \frac{2}{x^2}$$



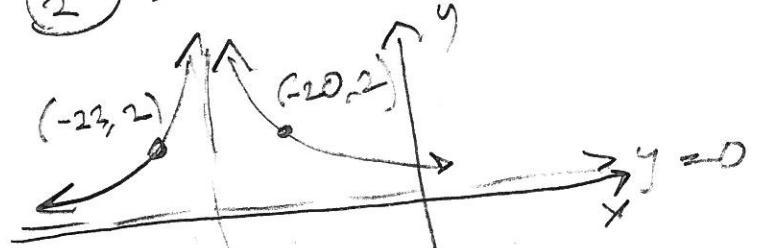
x=0

$$3) 2f(-3x+2) = \frac{2}{(-3x+2)^2}$$



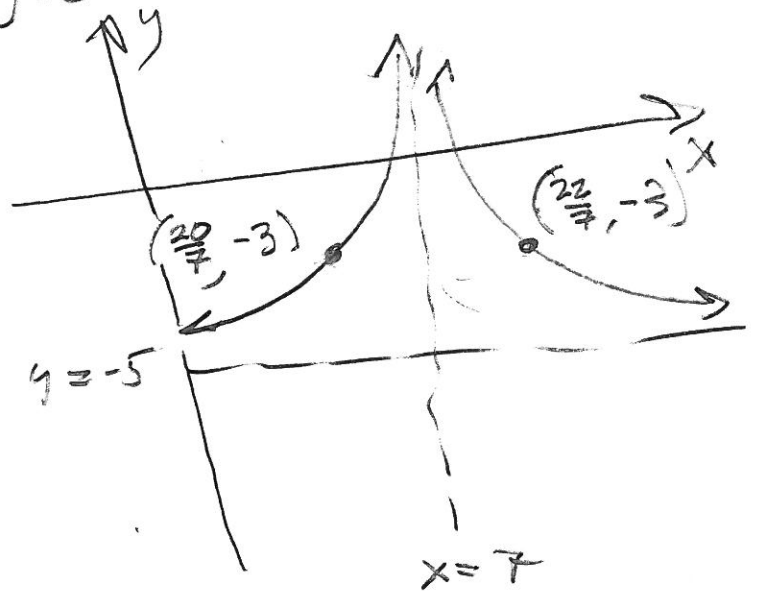
x=7/3!

$$2) 2f(x+2) = \frac{2}{(x+2)^2}$$



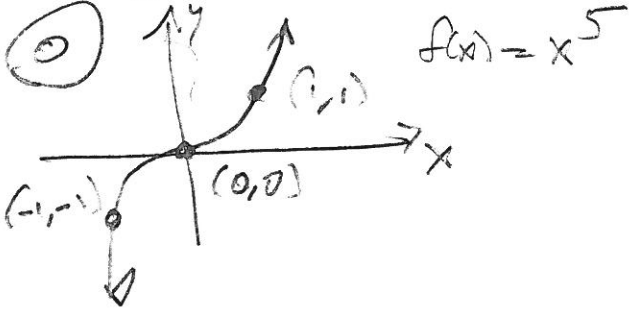
x=-2!

$$4) g(x)$$

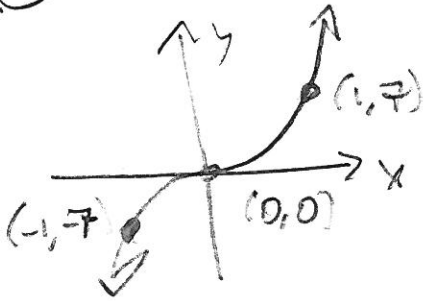


x=7/3

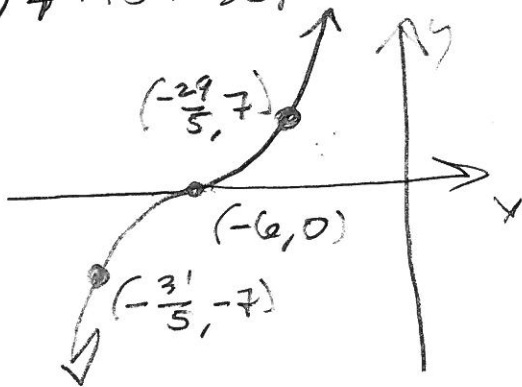
(6)  $g(x) = 7(5x+30)^5 + 8$



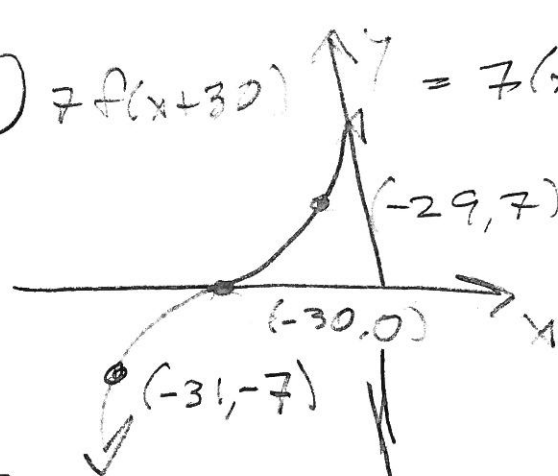
(1)  $7f(x) = 7x^5$



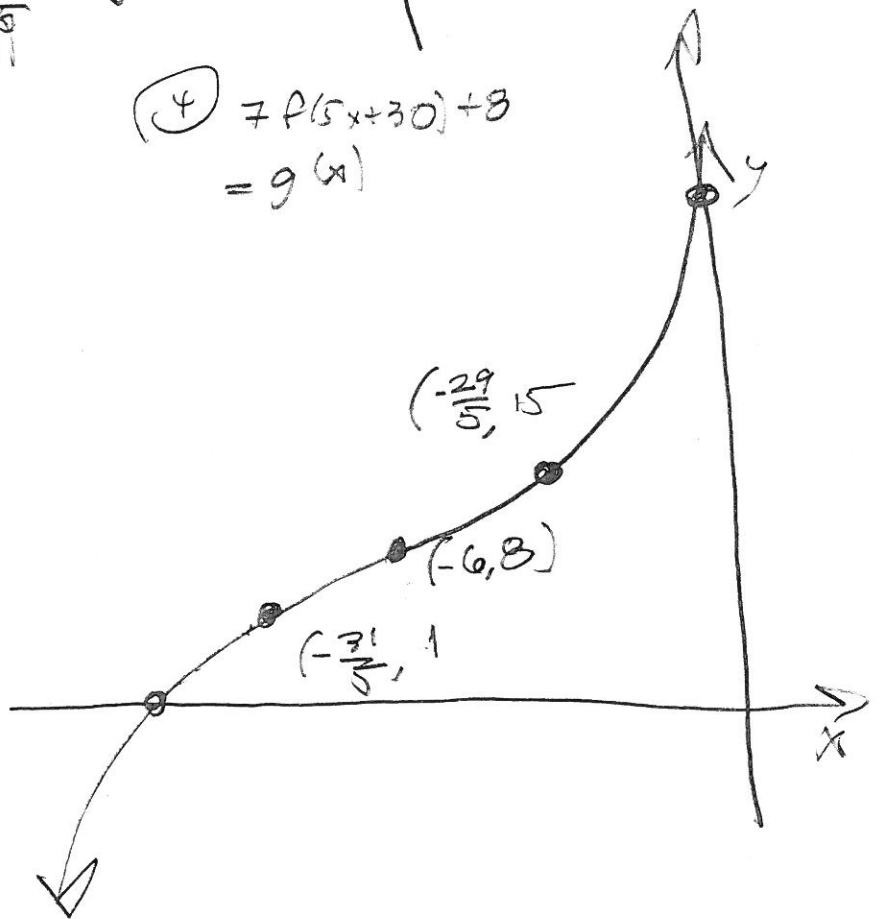
(3)  $7f(5x+30) = 7(5x+30)^5$



(2)  $7f(x+30) = 7(x+30)^5$



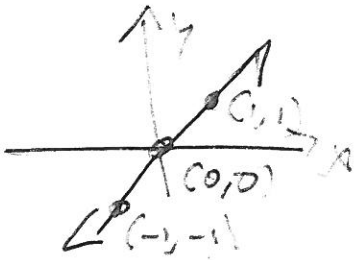
(4)  $7f(5x+30) + 8 = g(x)$



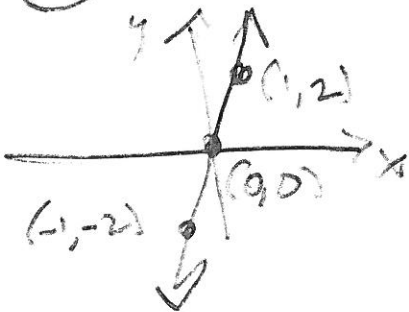
121 WP 2

⑦  $g(x) = 2(x-11) + 11$

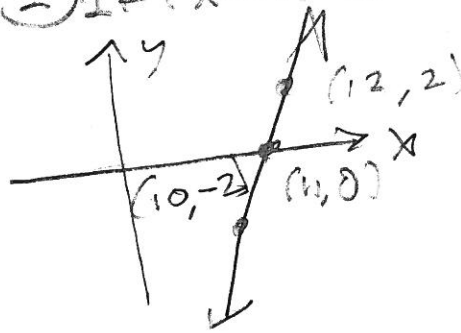
⑥  $f(x) = x$



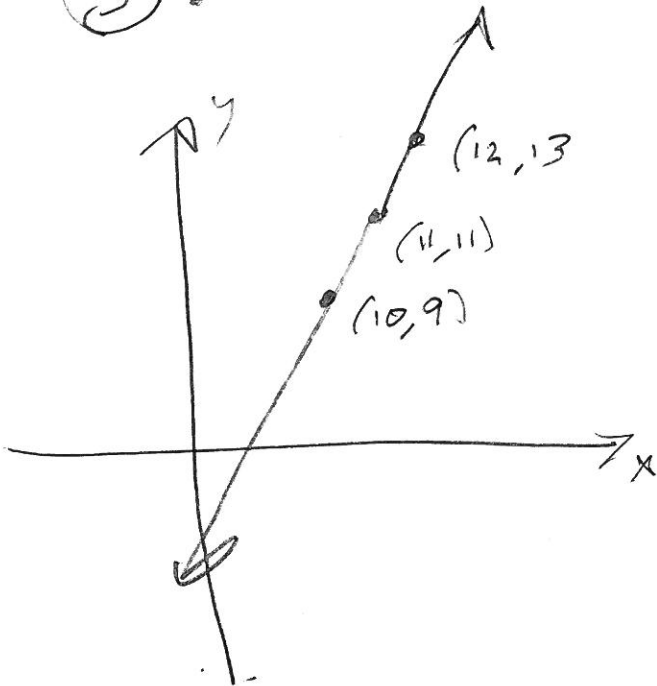
①  $2f(x) = 2x$



②  $2f(x-11) = 2(x-11)$

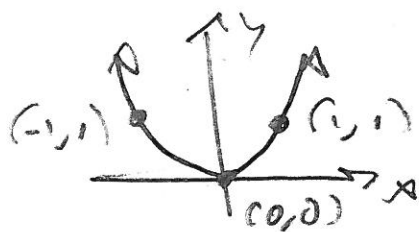


③  $2f(x-11) + 11 = 2(x-11) + 11$

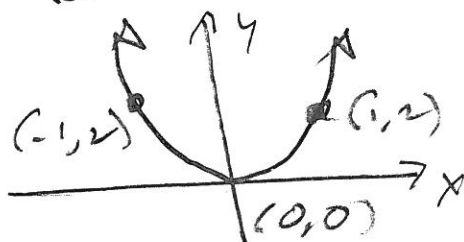


8  $g(x) = 2(x-11)^2 - 7$

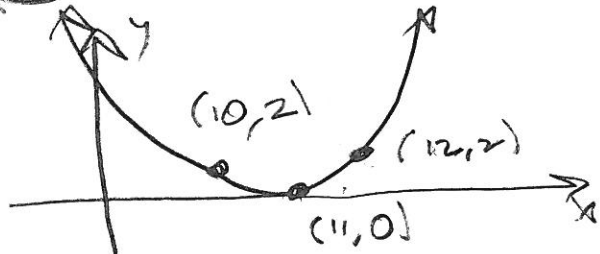
0  $f(x) = x^2$



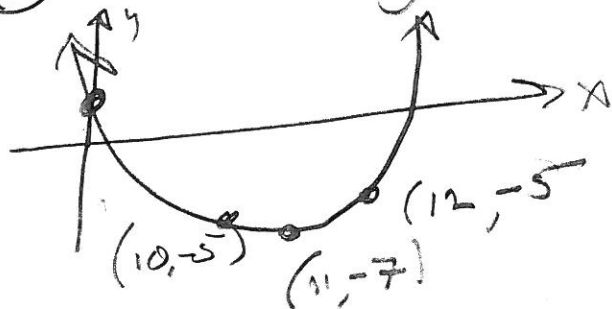
1  $2f(x) = 2x^2$



2  $2f(x-11) = 2(x-11)^2$



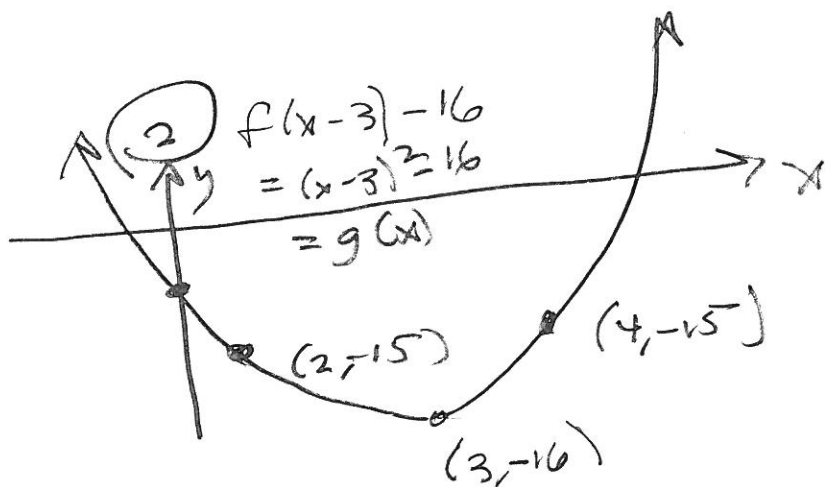
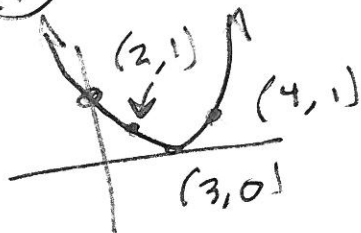
3  $2f(x-11) - 7 = g(x)$



9  $g(x) = x^2 - 6x - 7$   
 $= x^2 - 6x + 3^2 - 9 - 7$   
 $= (x-3)^2 - 16$

0 see # 8

1  $f(x-3) = (x-3)^2$





$$(10) \quad g(x) = 4x^2 + 5x + 17$$

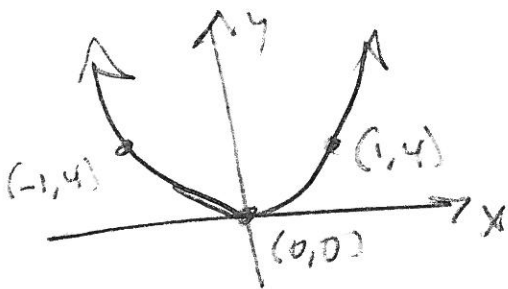
$$= 4\left(x^2 + \frac{5}{4}x\right) + 17$$

$$= 4\left(x^2 + \frac{5}{4}x + \left(\frac{5}{8}\right)^2\right) + 17 - 4\left(\frac{25}{64}\right)$$

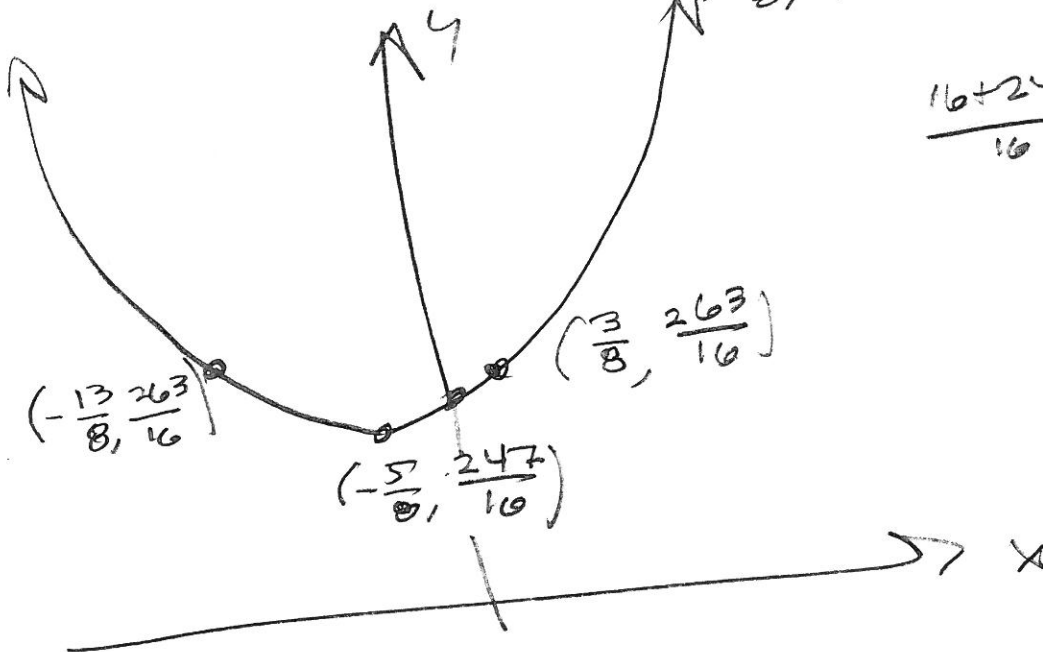
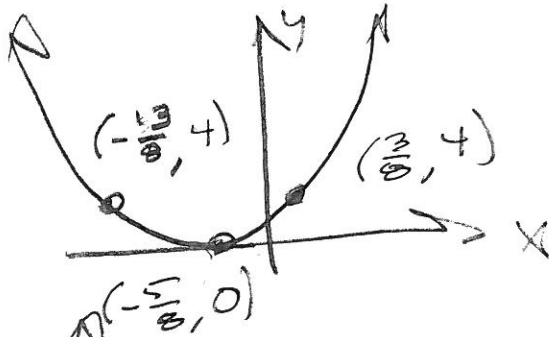
$$= 4\left(x + \frac{5}{8}\right)^2 + \frac{247}{16}$$

$$(11) \quad f(x) = x^2 \quad \text{See } \# 8$$

$$(1) \quad 4f(x) = 4x^2$$



$$(2) \quad 4f\left(x + \frac{5}{8}\right) = \left(x + \frac{5}{8}\right)^2$$



$$\frac{16 + 247}{16} = \frac{263}{16}$$

Scratch

$$\left(\frac{5}{8}\right)^2 = \frac{25}{64}$$

$$4\left(\frac{5}{8}\right)^2 = \frac{25}{16}$$

$$17 - \frac{25}{16}$$

$$= \frac{272 - 25}{16}$$

$$= \frac{247}{16}$$