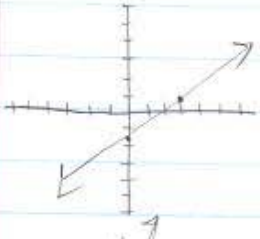
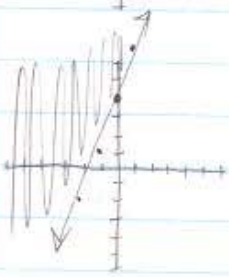
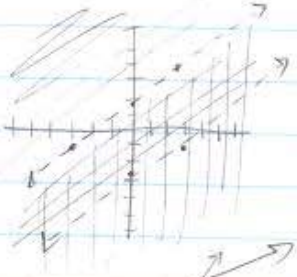
(1) a) $\{2,3,1,4\}$
b) $\{3,5,4,-3\}$
c) $\{(2,3)(3,5)(3,4)(1,-3)(4,5)\}$
d) one item in domain paired with one item in range

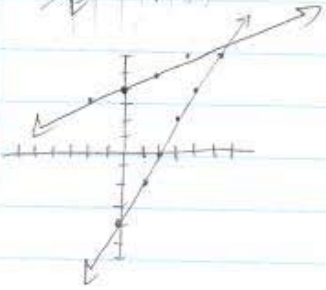
(2) 15

(3) 4

(4) 

(5) 

(6) 

(7) 

(8) $6x^3-12x^2+21x$

(9) $8x^9y^{18}$

(10) $\frac{y^6}{2x^7z^3}$

(11) $-72x^{18}y^{13}$

(12) 5

(13) $\frac{a+3}{2a+3}$

(14) $2\sqrt{105}$

(15) $\frac{\sqrt{35}}{7}$

(16) $4a^2|b|\sqrt{2b}$

(17) $6\sqrt{2}$

(18) $6x^2-5x-4$

(19) $6x^3-13x^2+9x-2$

(20) $x^2+8x+16$

(21) $-x^2+x+3$

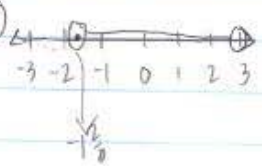
(22) $11x^3+5x^2-2x-3$

(23) $2x^2-2x-\frac{8}{2x-1}$

(24) $\frac{(x+7)(x-3)}{(x+4)(x+1)}$

(25) $\frac{(x-2)(2x+3)}{5}$

(26) $\frac{x-2}{x+2}$

(27) 

(28) $x \angle \frac{3}{4}$

(29) $x = 43/5$

(30) $x = 3, 5$

(31) $x = 1.18, .85$

(32) $a = -1$

(33) $\frac{4}{3} \leq x \leq 6$

(34) $(-1,3)$

(35) $x = 9$

(36) $x-y+3=0$

(37) $y = 3/2x+7$

(38) $x+2y+4=0$

(39) $x^2+12^2=18^2$

(40) $2x = 3(x+1)-12$

(41) $1400mi = r \cdot 4hr$
$450mi = r \cdot 1.5hr$

(42) $2x+x+y=23$
$.05(2x)+.10(x)+.25(y)=2.45$

(43) $x+y=12$
$y=x+2$

(44) $3900 = k(12)$

(45) $300 = \frac{1}{k}(48)$

(46) $\frac{35}{44}$

(47) $\frac{17+8\sqrt{2}}{23}$

(48) a. $\sqrt{221}$ b. $(1, 5/2)$

(49) 82 sq units

(50) $4.86 \cdot 10^{30}$

(51) a. $(x-2)(x^2+2x+4)$
b. $6x^5y^2(5y^2-2x)$
c. $(5x-3)(x-2)$

(52) 1.39, -.72

(53) 1.19, -1.69