

### Chapter 1 Review:

p. 940 # 13-15, 28, 30, 45-48, 54, 59, 61

(13)  $4+7-8 \div 2$   
 $4+7-2$   
 $11-2 = 9$

(14)  $2 \cdot 4 - (15-7)$   
 $27-8$   
 $19$

(15)  $9 - (4+3)^2 + 5$   
 $8 - 7^2 + 5$   
 $8 - 49 + 5$   
 $13 - 49$   
 $-36$

(28)  $-5(2x-1) = 3(x+4)$   
 $-10x+5 = 3x+12$   
 $-7 = 13x$   
 $-\frac{7}{13} = x$

(30)  $\left(\frac{1}{3}(x-6) = -\frac{2}{5}x + \frac{14}{15}\right)$   
 $5(x-6) = -6x+14$   
 $5x-30 = -6x+14$   
 $11x = 44$   
 $x = 4$

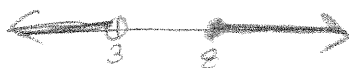
(45)  $4 \leq x+2 \leq 12$   
 $2 \leq x \leq 10$



(46)  $-6 \leq 3x+2 \leq 11$   
 $-8 \leq 3x \leq 9$   
 $-\frac{8}{3} \leq x \leq 3$



(47)  $6x+4 < 22$  or  $5x-8 \geq 32$   
 $6x < 18$  or  $5x \geq 40$   
 $x < 3$  or  $x \geq 8$



(48)  $5n+16 \leq 31$  or  $8+4n > 42$   
 $5n \leq 15$  or  $4n > 40$   
 $n \leq 3$  or  $n > 10$



(54)  $|9-3x| = 15$   
 $9-3x = 15$  or  $9-3x = -15$   
 $-3x = 6$  or  $-3x = -24$   
 $x = -2$  or  $x = 8$

(59)  $|x+3| > 4$   
 $x+3 > 4$  or  $x+3 < -4$   
 $x > 1$  or  $x < -7$

(61)  $|7x+7| < 14$   
 $-14 < 7x+7 < 14$   
 $-21 < 7x < 7$   
 $-3 < x < 1$

### Chapter 2 Review:

p. 942 # 44, 61-63, 69, 71

(44)  $(1, -6)$  and  $(4, -3)$   
 $m = \frac{-3+6}{4-1} = \frac{3}{3} = 1$

$y+6 = 1(x-1)$   
 $y+6 = x-1$   
 $y = x-7$

(61)  $f(-2) = 3(-2)+2 = -4$

(62)  $f(1) = 3(1)+2 = 3+2 = 5$

(63)  $f(5) = 5+4 = 9$

(69)  $y = 2|x| + 5$



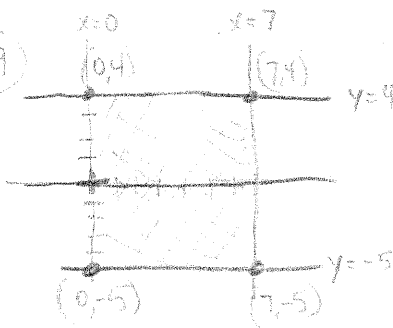
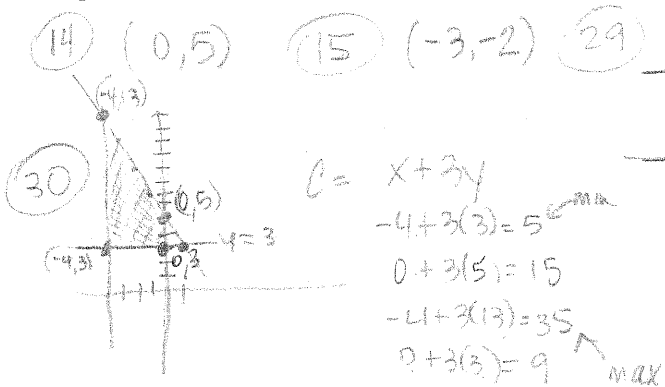
(71)  $y = |x+3|$



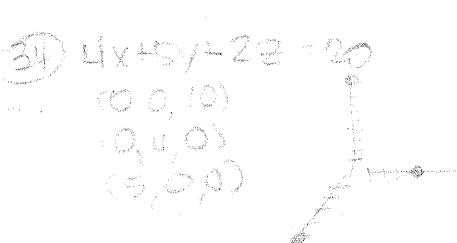
13  $(-3, 2)$   
 || to  $x - y = 7$   
 $-y = -x + 7$   
 $y = x - 7$   
 $m = 1$   
 || slope is  $m = 1$   
 $y - 2 = 1(x + 3)$   
 $y - 2 = x + 3$   
 $y = x + 5$  or  $-x + y = 5$

14  $(1, 4)$   
 $\perp$  to  $v = 3x + 1$   
 $\perp$  slope is  $m = \frac{1}{3}$   
 $y - 4 = \frac{1}{3}(x - 1)$   
 $y - 4 = \frac{1}{3}x - \frac{1}{3}$   
 $y = \frac{1}{3}x + \frac{11}{3}$  or  $-x + 3y = 11$

Chapter 3 Review:

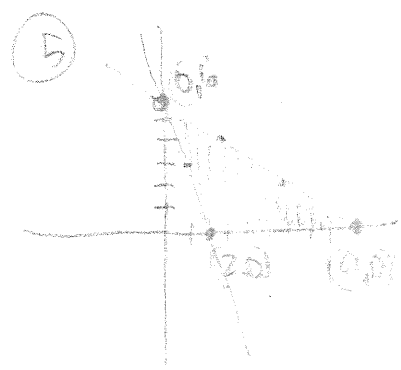


$C = 4x + 5y$   
 $= 4(0) + 5(-5) = -25 \leftarrow \text{min}$   
 $= 4(7) + 5(-5) = 3$   
 $= 4(0) + 5(4) = 20$   
 $= 4(7) + 5(4) = 48 \leftarrow \text{max}$



44  $(2, 3, 1)$  47  $(-3, 4, 2)$

- 1 C
- 2 E
- 5 C
- 6 D
- 8 A



$2x + 3y \leq 18$   
 $3y \leq -2x + 18$   
 $y \leq -\frac{2}{3}x + 6$   
 $3x + y \geq 6$   
 $y \geq -3x + 6$

$C = 4x + 3y$   
 $4(0) + 3(6) = 18 \leftarrow \text{min}$   
 $4(2) + 3(2) = 20$   
 $4(6) + 3(0) = 24$