

Semester 1 Final Exam Review Guide Answers

Chapter 1

Page 11	21. 28	23. 3	41. 8	43. 90
Pages 24-25	19. -9	21. -21	33. $-5s + 9$	45. 3822 feet below sea level
Pages 30-31	13. 96	15. 96	21. $-9xy$	
Page 35	9. 48	11. $-\frac{3}{2}$	15. $-\frac{2}{5}$	17. -54
Page 41	11. no solution	17. $\{-4\}$	21. $\{All\ Reals\}$	35. $x = \frac{y-b}{m}$ 41. $v = \frac{s}{t} + \frac{1}{2}gt$
Pages 52-53	3. 180 records	9. 12:15 pm	11. 34 dimes and 6 quarters	

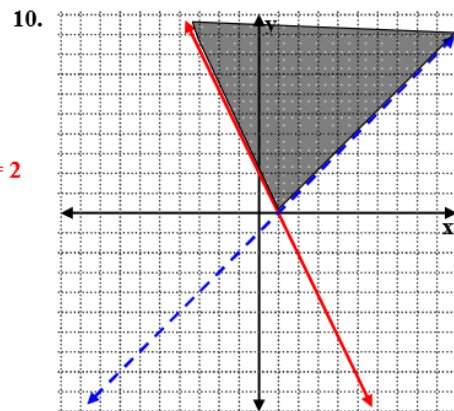
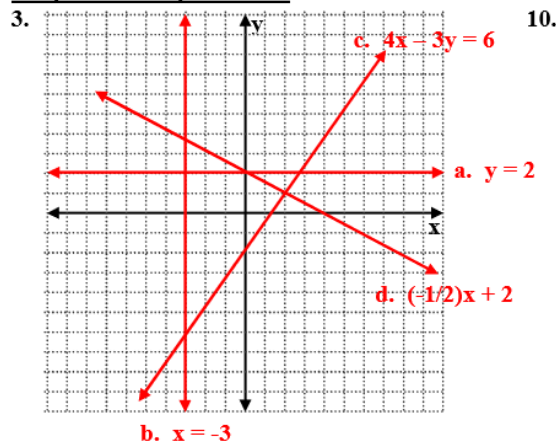
Chapter 2

Pages 62-63	15. $\{u: u > -3\}$	17. no solution	23. $\{All\ Reals\}$
Page 68	15. $\{t: t \geq 3\ or\ t < 2\}$	17. no solution	25. $\{x: -1 < x < 8\}$
Page 71	3. 9 cm	5. $\{5,7,9\}$ $\{7,9,11\}$	7. 93
Page 75	19. $\{-9, -1\}$	21. $\{u: -1 \leq u \leq 2\}$	25. $\{t: t < \frac{4}{3}\ or\ t > 2\}$
Page 79	13. $\{-1,2\}$	15. $\{p: p \leq -4\ or\ p \geq -1\}$	19. $x: \frac{1}{2} < x < \frac{5}{2}$

Chapter 3 (Page 164)

1. 2	2. $\{(2,3)\}$	3. See below	4. A) $-\frac{1}{2}$ B) $-\frac{1}{3}$ C) $\frac{2}{5}$
5. 4	6. A) $3x + y = -2$ B) $x - 2y = -3$ C) $3x - 2y = 12$		
7. A) $4x - 3y = 15$	B) $3x + 4y = 5$	8. $(1, -2)$	9. 6 lb 10. See below
11. $R = \{0, 1, 4\}$	12. $f(g(1)) = 5$ $g(f(1)) = -1$	13. $f(x) = 3x - 4$	14. \$12
15. Yes			

Graphs for Chapter 3 Test



Chapter 4 (Page 208) SKIP 15

1. $-7x^2 + 12$	2. $2x^3 + x^2y + y^3$	3. $-4p^{10}q^9$	4. $3x^3y^2 - 6x^2y^3$
5. $2x^2 + ax - 6a^2$	6. $4rs^3 - r^3s$	7. 63; 4410	8. $4b^2, 48a^2b^4$
9. $(x - 2)^2(x + 2)^2$	10. $(x - 1)(y + 2)$	11. $(5s - 6)(s - 2)$	12. $a(6a^2 - 7ab - 2b^2)$
13. $\{\frac{1}{3}, 3\}$	14. $\{-2 DR, 2 DR\}$	16. $\{x: -3 \leq x \leq 4\}$	17. $\{x: -2 < x < 0 \text{ or } x > 2\}$

Chapter 5 (Page 257) SKIP 5,6,17

1. $\frac{3y^2}{2x^3}$	2. $\frac{2}{m^5}$	3. p^3	4. $\frac{1}{u^3v}$
7. A) All Reals except 4 and -3 B) $\frac{2}{3}$		8. A) All Reals except $\frac{2}{3}$ B) 4 and -3	
9. $\frac{4x^2}{y^3}$	10. $(u - 3)(u - 2)$	11. $\frac{5}{6}$	12. $\frac{1}{s+1}$
13. $\frac{a}{b}$	14. $-\frac{xy(x+y)}{(x-y)^2}$	15. $\{x: x \leq 3\}$	16. $\{-\frac{3}{2}, 6\}$
18. $\{-3\}$			

Chapter 6 (Page 303)

1. -8	2. 49	3. -4	4. 3	5. $\{\pm \frac{9}{4}\}$
6. $\{-2\}$	7. $3\sqrt{2}$	8. $\frac{5 a^3 \sqrt{6b}}{8b^2}$	9. $7\sqrt{5} - 20\sqrt{2}$	10. $\frac{8\sqrt{15x}}{15}$
11. $4 + \sqrt{6}$	12. $\frac{3+\sqrt{5}}{2}$	13. $\{7\}$	14. $\{7\}$	