PAGE 1

1. -21
2. -77
3. 72
4. 6
5. 2
6. 0
7. 2
8. 3
9. 7
10. Infinite solutions (you get h=h, which means if you plug in any number, it makes a true statement)

PAGE 2

1. $x \leq 24$
2. $x > -12$
3. $r < -1$ graph goes to the left
4. $d > -20$ graph goes to the right
5. $v \leq 32$ graph goes to the left
6. $-12 \geq p$ graph goes to the left

PAGE 3

7. $y \geq -2$
8. $x \geq -1$
9. $x < -1/2$
10. $5 < x$
11. $-1 < y < 3$ graph is in-between -1 and 3
12. $y < -11$ or $y \geq 3$ graph is in two different directions
13. $0 < n < 5$
14. $m < 12$ or $m \geq 13$
15. x=2 or -12/7
16. k=2 or -8

PAGE 4

17. $-5 < b < 15$
18. $s \geq 4$ or $s \leq 3$
19. graph is shaded upwards
20. graph is shaded downwards

PAGE 5

1. yes
2. no
3. see graph
4. graph is a horizontal line going through positive 3
5. x intercept is 4; y intercept is -6
6. x intercept is -4; y intercept is -24

PAGE 6

7. -1/2
8. Undefined (can't have 0 as denominator)
9. a. y=2x+3; b. 2; c. 3; d. graph
10. a. y=1/2x +3; b. ½; c. 3; d. graph

PAGE 7

15. -19
16. 33
17. -2
18. 6
19. Graph
20. Graph
21. Bonus is y=-6

PAGE 8

1. y=x-4
2. y= -2x+4
3. y=2x+9
4. y= -3/4 x +2
5. y= -2/5 x - 1
6. y= 1/3 x +6
7. y= -6x +41
8. y= -9x -102
9. 6

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10. 3
11. 2x+y=5
12. –x +6y = -54
13. 4x +y = -23
14. y= 5x+7
15. y= -1/2 x +4
16. y= -1/2 x +7/2
17. y= -3/4 x -4

PAGE 10

18. graph
19. graph
20. a. 3/2; b. -2/3; c.graph

PAGE 11

1. no
2. yes
3. -1, 1
4. -3, -9
5. 3, 2
6. 4, 0
7. 3, -1
8. -3, -9
9. -2, -3
10. 1, -3
11. 3, 5
12. 6, 10
13. -2, 2
14. -8, -25
15. No solution
16. 7, 3
17. 4, 5
18. Infinite solutions

PAGE 12

19. Graph is shaded on upper-left corner
20. Graph is shaded on lower-left corner

PAGE 13

1. 4 senior tickets and 7 children's tickets
2. 7 small boxes and 13 large
3. 18 students per van and 59 students per bus
4. $4 for apple and $14 for lemon

PAGE 14

1. a. 200 chirps at 90 degrees; b. 70 degrees when 120 chirps
2. a. about $450.34 to drive 1000km; b. about $570.82 to drive 2000km; c. can drive 2242.2km for $600
3. a. $7.05 to go 10 miles; b. about 38 miles for $20

PAGE 15

1. x=1, y=4, z= -2
2. x=1, y=0, z=5
3. gold is .50 cents; silver is .35 cents; bronze is .25 cents
4. x=349, y=722, z=101

PAGE 16

1. $-6x^2 + x + 4$; second degree
2. $3x^2 - 5x + 5$; second degree
3. $-8x^3 + 10x^2 - 6x$
4. $12x^2 - 16x - 16$
5. $4x^2 - 9$
6. $x^3 - 29$
7. $3x^2(9x - 10)$
8. $5x^2(1 + 3x)$
9. X=0, 5
10. X=0, 2

PAGE 17

1. $10x^2 - 9x - 14$; $second\ degree$
2. $-4x^3 + 2x^2 + 15x - 9$; $second\ degree$
3. $-4x^4 - 8x^2 - 4x$
4. $4x^2 - 31x + 21$
5. $9x^2 - 81$
6. $x^3 + 10x^2 + 5x - 20$
7. $5x(3x^2 + 5)$
8. $6x^2(3x^2 - 4)$
9. $x = 0, 3$
10. X=0, -7/2
11. (x-8)(x-2)
12. (x+w)(w+14)
13. 3(x-2)(x-3)

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14. 2(x-6)(x-4)
15. (2x+1)(3x-4)
16. (3x-2)(x-5)
17. (x+4)(x-4)
18. (9x+2)(9x-2)
19. $(x^2 + 3)(x - 4)$
20. $(x^2 - 5)(x + 13)$
21. x= -6, -8
22. x= -7, 2
23. x= 7, -7
24. x= -1/2, 5