Chapter 2 Test Form A

Answers to even numbered problems.

2. $b = -11$ 4. $w = -3$ 6. $x = 8$ 8. $x = -8$ 10. $p = 46$ 12. $w = 14$

16. $b = \frac{7c+9}{2}$ 18. $x = \#$ of $CD's$ $EQ: 13.95x + 1.95 = 85.65$ $x = 6\ CD's$

20. No Solution 22. $y = -\frac{7}{6}$

30. $x =$ measure of the third angle. $EQ: x + 2(50) = 180$ $x = 80°$

32. $x =$ # of hours busses have driven. $EQ: 55x + 45x = 400$ $x =$ 4 hours

Chapter 3 Test Form A

Answers to even numbered problems.

2. a. Yes b. Yes c. No 4. $x \le 28$ 6. $x > 25$ 8. $x \ge 2$ 10. $x \ge -3.5$

12. $-3 \le q \le 0$ 14. $-3 < n < 6$ 16. $b < -7$ or $b > -1$ 18. $x < 1$

20. $y \le 3$ 22. $a < -8$ 24. $x < 6$ 26. $x < -1$ 28. $x \le 3$

32. $x \le 2$ or $x \ge 4$ 34. $w = 11, 15$ 36. $y = 2, 14$

38. $Ineq: x + 2395 - 50 \ge 5000$ $x \ge 2655$

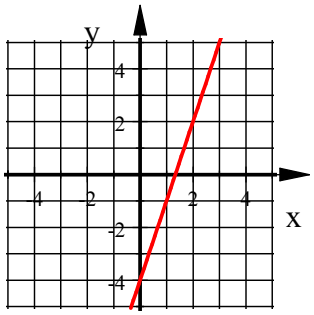
40. $|x - 397| \le 10$ $387 \le x \le 407$

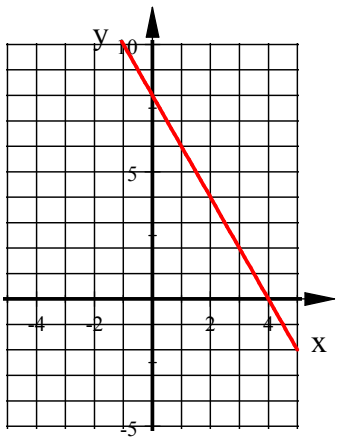
Chapter 6 Test Form A

Answers to even numbered problems.

2. False. The slope of a vertical line is undefined 4. $m = -\frac{3}{2}$

6. 8.





10. $y = \frac{1}{4}x + 5$ 12. $y = \frac{7}{3}x + 4$ 14. $x - int = \frac{24}{5}$ $y - int = -8$

16. $x - int = 5$ $y - int = -5$ 18. $y - 1 = -2x$ 20. $y + 3 = -\frac{8}{3}(x - 3)$

22. $y = -\frac{2}{7}x - \frac{4}{7}$ 24. $y = \frac{3}{5}x + \frac{4}{5}$ 26.

Chapter 7 Test Form A

Answers to even numbered problems.

2. Sol: $(-3,-3)$ 4. One 6. Infinitely Many 8. None

10. $(-2,-11)$ 12. $(4,1)$ 14. $(1,2)$

16. 63 string instruments and 28 wind instruments

18. D.

26. a. Inequalities are: $2W + 2L \leq 500, W \leq 100$ $W = width$ $L = length$

b.

c. Solutions are points within the shaded region or on the boundary lines

Possible answers could be: $W = 50, L = 100$ or $W = 100, L = 150$

28. a. $x = \#$ of 24-exposure rolls $y = \#$ or 36-exposure rolls

EQ: $x + y = 22$ $9x + 12y = 219$

b. $x = 15$ $y = 7$

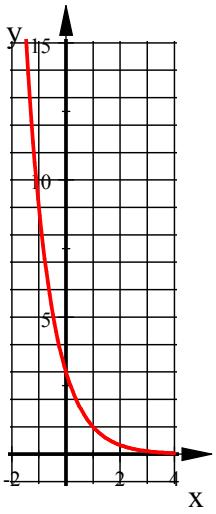
Chapter 8 Test Form A

Answers to even numbered problems.

2. 1.156203 4. $\frac{n^{15}}{m^6}$ 6. $-\frac{u^4}{v^2}$ 8. 4.8×10^4 10. -7×10^{11}

18. $y = \frac{1}{9}, 4,$ and 24 20. $h(-1) = \frac{15}{4}$ $h(1) = \frac{12}{5}$ $h(2) = \frac{48}{25}$

22.



26. a. after 36 yrs investment is worth \$16,000
after 60 yrs investment is worth \$64,000
b. $y = 2000(2)^x$ $x = \#$ of 12 year periods.

28. a. $y = 1000(1.004)^x$ $x = \#$ of months
b. after 1 year you will have \$1049.07
after 2 years you will have \$1100.55

30. $x < 0$
the function will never be less than 0.

Chapter 9 Test Form A

Answers to even numbered problems.

2. $2x^3 - x^2 + 4x$ This is a cubic trinomial

4. $-x^5 - x^3$ This is a 5th degree polynomial and it is a binomial

6. $5x^2 + 9x + 2$ 8. $-3x^3 - 12x^2 + 15x$ 10. $-8x^3 + 24x^2 + 32x$

12. $42x^4 - 7x^2 + 21x$ 14. $6x^2 + 12x^2 + 6x$ 16. $a^2 + 2a - 3$

18. $15x^2 - 7x - 36$ 20. $-2x^3 + 12x^2 - 13x - 15$ 22. $3x$

24. $6y^2$ 28. $V = h(4h - 20)(2h + 10) = 8h^3 - 200h$

30. $A = (4x)(3x+4) - (3x)(x+4) = 9x^2 + 4x$

32. $(y+9)^2$ 34. $(y \pm 12)$ 36. $(3x \pm 8)$ 38. $14(x \pm 2)$

40. $4y^2 + 16y + 16$ 4 was the coefficient of y^2

42. $36y^2 - 120y + 100$ 120 was the coefficient of y

44. $4x^3$ is the GCF of the first two terms
-1 is the GCF of the last two terms

46. $2(x-2)(3x+5)$ 48. $2(3x^2-2)(2x-3)$

50. $-(4y-3)(y^2-2)$ or $(-4y+3)(y^2-2)$

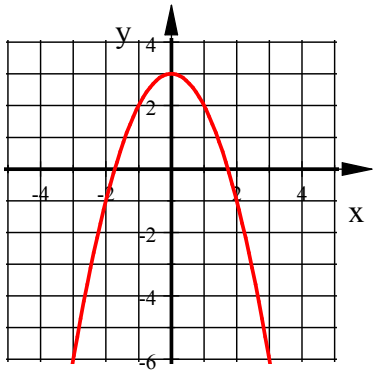
Chapter 10 Test Form A

Answers to even numbered problems.

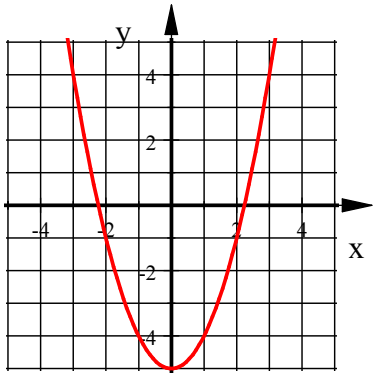
2. D 4. B 6. LOS: $x = -2.5$ Vertex: $(-2.5, -18.25)$ Vertex is a minimum

8. LOS: $x = -16$ Vertex: $(-16, -64)$ Vertex is a minimum

10.



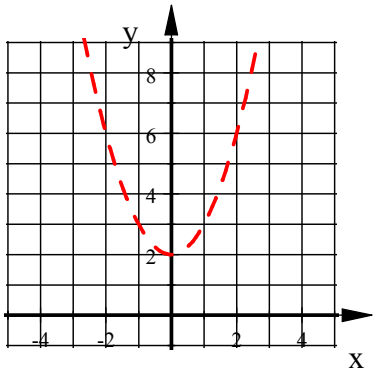
12.



14. 1 x-intercept 16. No x-intercepts 18. Square roots are ± 30

20. Square roots are $\pm\frac{4}{5}$

22. You should shade above the parabola (what looks like inside the parabola).



24. Between 4 and 5

26. between 20 and 21

28. Discriminant is Positive→2 solutions

30. Discriminant is Negative→No Real solutions or 2 Imaginary solutions

32. $x = \pm 4$

34. $x = 5.24, 0.76$

36. $x = \pm 9$

38. length of each side $= 24$ft

40. Graph shows a Quadratic relationship.
EQ: $y = 1.5x^2$

42. Graph shows a Linear relationship.
EQ: $y = x + 3$