# ACTAAP

Arkansas
Comprehensive Testing, Assessment
& Accountability Program

## *Algebra I Spring* *End of Course Examination* Released Item Booklet

## April 2004 Administration

**Arkansas Department of Education**

**1.** Find the value of the expression:

$$4 + 2^3 + (3 + 9) \div 4$$

   A.   $5\frac{1}{2}$

   B.   $7\frac{1}{2}$

   C.   13

  * D.   15

**2.** The amount of methylmercury in a human body can be measured by analyzing a person's blood sample. The following data set represents the amounts of methylmercury, in micrograms, found in the individual blood samples of eight people.

     {45, 35, 50, 21, 45, 35, 45, 40}
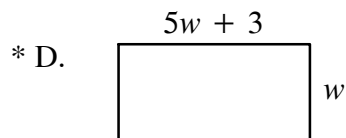
What is the mode of this data set?
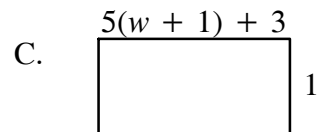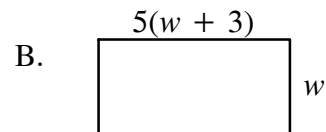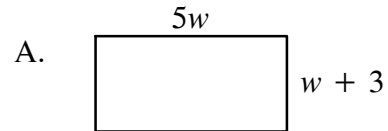
   A.   35
   B.   39.5
  * C.   45
   D.   425

**3.** A rectangle has a length that is 3 more than 5 times the width. Which diagram correctly illustrates this sentence?

A.

$5w$ / $w + 3$

B.

$5(w + 3)$ / $w$

C.

$5(w + 1) + 3$ / $1$

* D.

$5w + 3$ / $w$

**Use the table below to answer question 4.**

|   | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 2 | 3 | 4 | | | | | |
| 2 | 2 | 4 | 9 | 16 | | | | | |
| 3 | 3 | 8 | 27 | 64 | | | | | |
| 4 | 4 | 16 | 81 | 256 | | | | | |
| 5 | 5 | 32 | 243 | 1,024 | | | | | |
| 6 | 6 | 64 | 729 | 4,096 | | | | | |
| 7 | 7 | 128 | 2,187 | 16,384 | | | | | |
| 8 | 8 | 256 | 6,561 | 65,536 | | | | | |

4.  Evaluate this expression using the table above:  $4(\text{D8} \cdot \text{A1} \cdot \text{B6})$

    A.    1,679,616

    B.    4,194,304

 * C.    16,777,216

    D.    47,775,744

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5.  A sports store bought a case of baseballs for $250.00.  The profit the store makes from the baseballs is represented by the function $p = 2b - 250$, where $p$ represents the profit and $b$ represents the number of baseballs. What is the range of this function when the domain is {50, 125, 200, 250}?

    A.    {350, 500, 650, 750}

    B.    {150, 0, 150, 250}

 * C.    {−150, 0, 150, 250}

    D.    {150, $187\frac{1}{2}$, 225, 250}

6.  Rewrite the number 0.000000512 using scientific notation.

    A.    $0.512 \times 10^{-7}$

 * B.    $5.12 \times 10^{-7}$

    C.    $0.512 \times 10^{7}$

    D.    $5.12 \times 10^{7}$

**7.** Which of the following is an integer?

   A.   $\sqrt{2}$

\* B.   3

   C.   5.4

   D.   $6\frac{2}{3}$

**8.** A school bus took $2\frac{3}{4}$ hours to drive to the nearest amusement park located 135 miles away.  What was the approximate rate at which the bus traveled?

\* A.   49 mph
   B.   52 mph
   C.   55.6 mph
   D.   57.7 mph

**9.** Simplify:

$$\begin{bmatrix} 0 & 2 & 3 \\ 1 & -1 & 2 \\ 4 & -2 & 5 \end{bmatrix} - 2\begin{bmatrix} 5 & -4 & 3 \\ 2 & 0 & -2 \\ 1 & -1 & 3 \end{bmatrix}$$
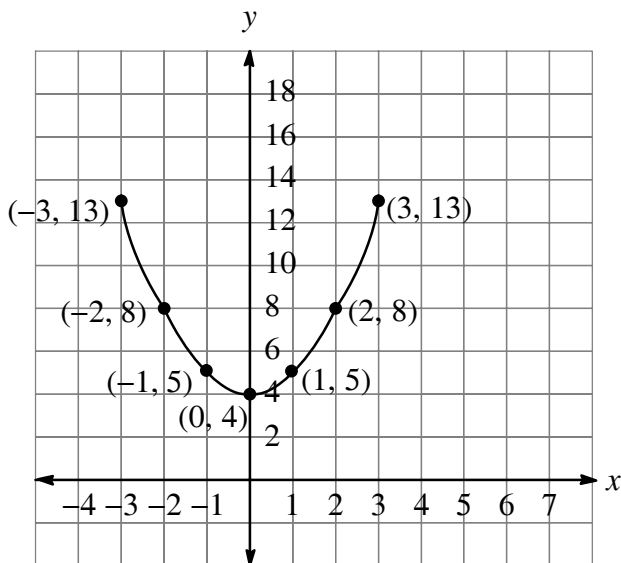
\* A.   $\begin{bmatrix} -10 & 10 & -3 \\ -3 & -1 & 6 \\ 2 & 0 & -1 \end{bmatrix}$

   B.   $\begin{bmatrix} 3 & -4 & 4 \\ 1 & -3 & -2 \\ 3 & -5 & 6 \end{bmatrix}$

   C.   $\begin{bmatrix} -10 & -8 & -9 \\ -3 & -3 & -2 \\ 2 & -4 & -1 \end{bmatrix}$

   D.   $\begin{bmatrix} -10 & 9 & -2 \\ -2 & -1 & 2 \\ 1 & 0 & -1 \end{bmatrix}$

**Use the graph below to answer question 10.**



**10.** The function $y = x^2 + 4$ is shown above. What is the range of the graph shown?

    A.   $\{y: 4 \leq y\}$

\* B.   $\{y: 4 \leq y \leq 13\}$

    C.   $\{y: 4 \geq y \geq 13\}$

    D.   $\{y: 13 \leq y\}$

**11.** The cost of renting a car at Ace Auto Rentals is $45 a day plus $0.05 a mile. What is the expression for total cost if $d$ is the number of days and $m$ is the number of miles driven?

\* A.   $45d + .05m$

    B.   $45d(.05m)$

    C.   $45.05(d + m)$

    D.   $45.05dm$

**12.** At what points does the graph of $y = x^2 - 4$ intersect the $x$-axis?

    A.   (0, 0) and (0, −4)

    B.   (0, −4) and (−2, 0)

\* C.   (−2, 0) and (2, 0)

    D.   (0, −4) and (2, 0)

**13.** Jordan has some **square** pieces of carpet that measure 4 feet on a side. He puts three of them together, end to end, to form a **rectangle** in front of his workbench. What is the perimeter of this rectangle?

\* A.   32 feet

    B.   32 feet$^2$

    C.   48 feet

    D.   48 feet$^2$

**14.** A movie theater charges $7 for adult tickets ($a$) and $4 for children's tickets ($c$). Last Friday the theater sold 272 tickets and collected $1,694. Which of the following systems of equations is a correct representation of this data?

    A.   $\begin{cases} a + c = 1{,}694 \\ 7a + 4c = 272 \end{cases}$

\* B.   $\begin{cases} a + c = 272 \\ 7a + 4c = 1{,}694 \end{cases}$

    C.   $\begin{cases} 272a + 1{,}694c = 4 \\ a + c = 7 \end{cases}$

    D.   $\begin{cases} 7a + 4c = 272 \\ 11a + 11c = 1{,}694 \end{cases}$

**15.** Which set of ordered pairs is a function?

    A.    {(1, 2), (2, 4), (1, 4)}

    B.    {(1, 2), (4, 2), (4, 3)}

 * C.    {(1, 5), (2, 7), (3, 5)}

    D.    {(3, 0), (3, −1), (0, 3)}

**16.** Completely factor:

$$x^2 + x - 6$$

 * A.    $(x + 3)(x - 2)$

    B.    $(x - 3)(x + 2)$

    C.    $(x + 6)(x - 1)$

    D.    $(x - 6)(x + 1)$

**17.** Which represents an equation?

    A.    3 times a number plus 5

 * B.    5 times a number equals 3

    C.    7 and the sum of $x$ and 3.14

    D.    3.14 and the product of 7 and $x$

**18.** Jake is training for an in-line skate race. His goal is to skate at least 100 miles each week. Jake could only skate 7 miles on Monday. What is the fewest number of miles he must average for each of the next six days to achieve his goal?

    A.    14.3 miles

 * B.    15.5 miles

    C.    $16.\overline{6}$ miles

    D.    $17.8\overline{3}$ miles

**19.** The total cost of stamps is a function of how many stamps are purchased. Which statement is true?

 * A.    The total cost of stamps is the dependent variable.

    B.    The total cost of stamps is the independent variable.

    C.    The number of stamps purchased is the dependent variable.

    D.    There is no relation between the number of stamps purchased and the total cost.

**Use the graph below to answer question 20.**
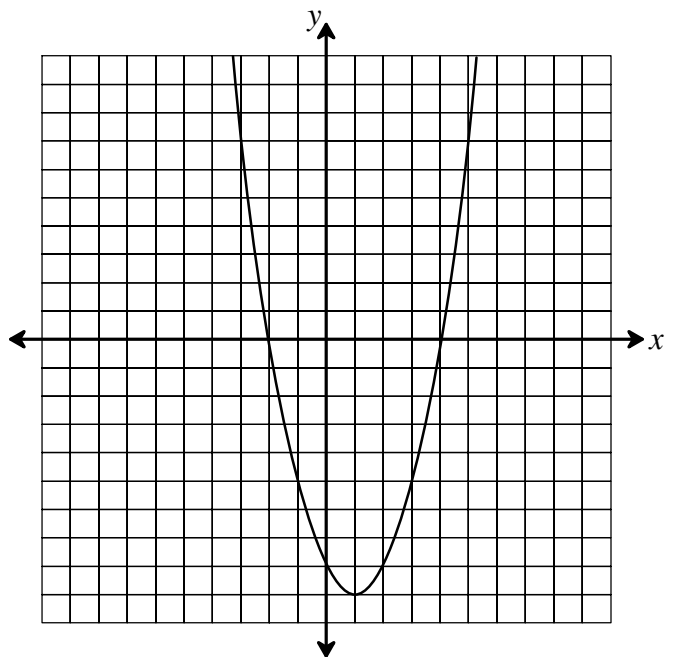


**20.** The graph above represents the equation $y = x^2 - 2x - 8$. What is the solution to $x^2 - 2x - 8 = 0$?

    A.    $x = -8$

    B.    $x = 2, x = 4$

 * C.    $x = -2, x = 4$

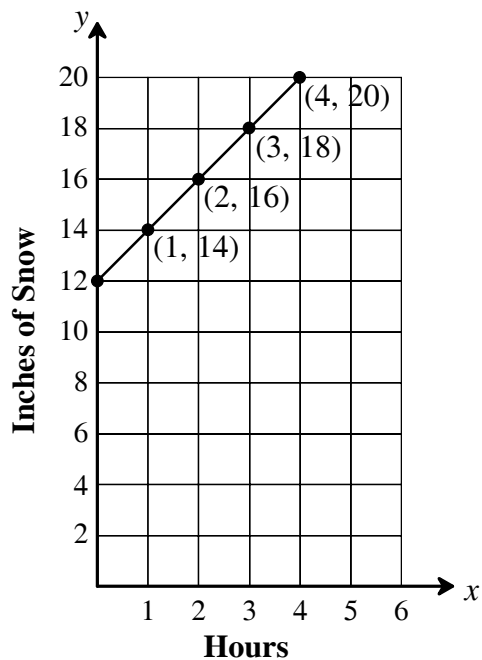    D.    $x = -8, x = -2, x = 4$

**21.** If $x = 3$ in the expression
$5x + 2y = 7$, what is the value of $y$?

   A.    −8

\* B.    −4

   C.    4

   D.    8

**22.** What is the product of $a$ and $b$?

   A.    $a + b$

   B.    $a - b$

\* C.    $ab$

   D.    $\dfrac{a}{b}$

**Use the graph below to answer question 23.**



**23.** When snow is 12 inches deep on a ski slope, a snow-making machine begins to produce snow at a constant rate as shown in the graph above. At what rate is snow produced?

   A.    $\dfrac{1}{2}\,\dfrac{\text{inch}}{\text{hour}}$

\* B.    $2\,\dfrac{\text{inches}}{\text{hour}}$

   C.    $8\,\dfrac{\text{inches}}{\text{hour}}$

   D.    $26\,\dfrac{\text{inches}}{\text{hour}}$

24. A taxi cab driver charges $2.00 per trip plus $0.50 per mile. The distance traveled is $x$ miles. Which function represents the cost of a trip?

    A. $f(x) = 5x + 2$
    * B. $f(x) = 0.5x + 2$
    C. $f(x) = 50x + 2$
    D. $f(x) = 2x + 0.50$

25. 70,000 football fans each spent approximately $500 on tickets, food, and lodging for the recent playoff game. What was the total amount spent?
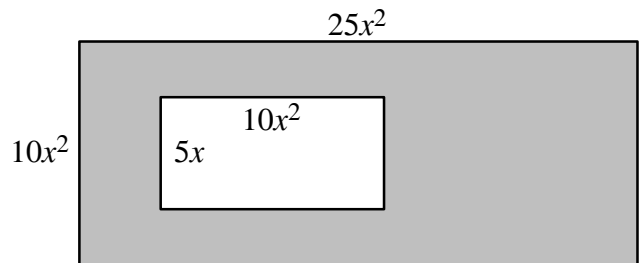
    A. $3.5 \times 10^5$
    B. $3.5 \times 10^6$
    * C. $3.5 \times 10^7$
    D. $3.5 \times 10^8$

26. If $j = 4$ and $k = 3$, what is $m$?

    $$m = \frac{j^k}{(\sqrt{j})^k}$$

    A. 1
    * B. 8
    C. $\frac{81}{8}$
    D. 512

**Use the figure below to answer question 27.**



27. All figures shown above are rectangles. What is the area of the shaded region?
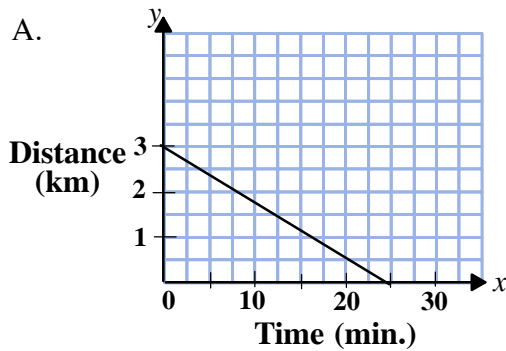
    A. $35x^4 - 50x^3$ units$^2$
    B. $35x^4 - 15x^3$ units$^2$
    * C. $250x^4 - 50x^3$ units$^2$
    D. $250x^4 - 15x^3$ units$^2$

**Use the table below to answer question 28.**

| Time $t$ (Minutes) | Distance $d$ (Kilometers) |
|---|---|
| 3 | 0.435 |
| 5 | 0.725 |
| 10 | 1.450 |
| 12 | 1.740 |
| 17 | 2.465 |

28.  Mr. Jones is keeping track of his speed (in km per hour) on his exercise bike. Which graph below best fits the data?

A.

B.

C.

* D.
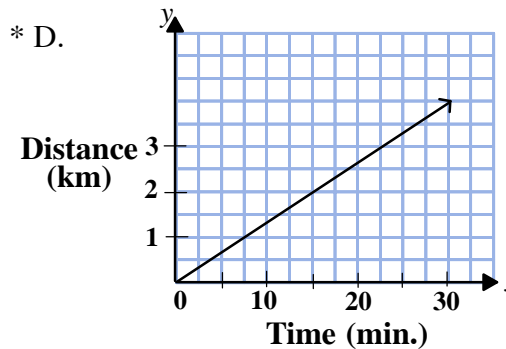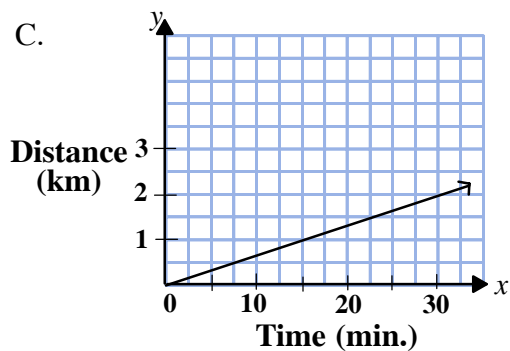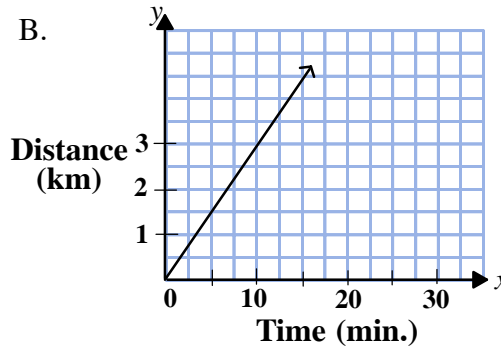
**29.** Which table of values represents a function?

* A.

| $x$ | −2 | −1 | 0 | 1 |
|---|---|---|---|---|
| $y$ | 2 | 2 | 2 | 2 |

B.

| $x$ | 2 | 2 | 2 | 2 |
|---|---|---|---|---|
| $y$ | 4 | 3 | 2 | 1 |

C.

| $x$ | −2 | −1 | 0 | −1 |
|---|---|---|---|---|
| $y$ | 3 | 2 | 3 | 3 |

D.

| $x$ | 2 | 1 | 2 | 1 |
|---|---|---|---|---|
| $y$ | 5 | −4 | 4 | 5 |

**30.** Completely factor the following polynomial:

$$16x^3y - 32x^2y^2 + 12xy^3$$

A.   $x^2y^2(16x - 32 + 12y)$

B.   $12(4x3y - 20x^2y^2)$

C.   $16x(x^2y - 2xy^2 - 4y^3)$

* D.   $4xy(2x - y)(2x - 3y)$

**31.** Translate this verbal sentence into an inequality:

The sum of twice a number and 25 is greater than or equal to 50.

A.   $2x + 25 < 50$

B.   $2x + 25 \leq 50$

C.   $2x + 25 > 50$

* D.   $2x + 25 \geq 50$

**32.** Michelle is taking a trip to Japan. She wants to use Japanese yen to pay for souvenirs. The currency rate is $1.00 = 120$ yen. The bank charges $20 as a service fee to exchange currency. Michelle spent $250 to convert her dollars to yen. How many yen did she receive?
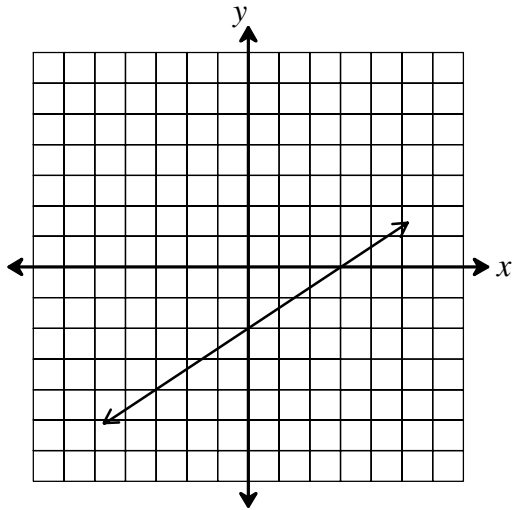
A.   2.5 yen

* B.   27,600 yen

C.   30,000 yen

D.   32,400 yen

**33.** What is the mean of the set of data below?

$$\{1, 17, 3, 5, 9, 5, 15, 7, 10\}$$

A.   5

B.   7

* C.   8

D.   9

**Use the graph below to answer question 34.**



**34.** What is the zero of the function graphed above?

    A.    $x = -2$

    B.    $x = 0$

    C.    $x = 1$

  \* D.    $x = 3$

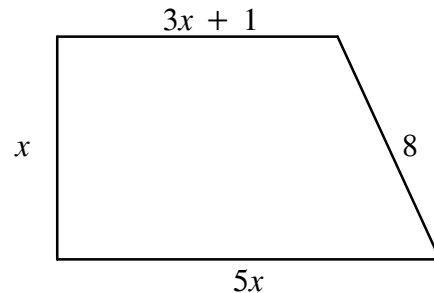**35.** Solve: $y^2 + 8y + 15 = 0$

    A.    $y = -3$ or $y = 5$

    B.    $y = 3$ or $y = -5$

  \* C.    $y = -3$ or $y = -5$

    D.    $y = 3$ or $y = 5$

**36.** Which would be the **best** first step in solving the following problem?

$$5(x - 3) = 100$$

    A.    subtract 3 from both sides of the equation

    B.    add 3 to both sides of the equation

  \* C.    distribute the 5 throughout the parentheses

    D.    multiply by 5 on both sides of the equation
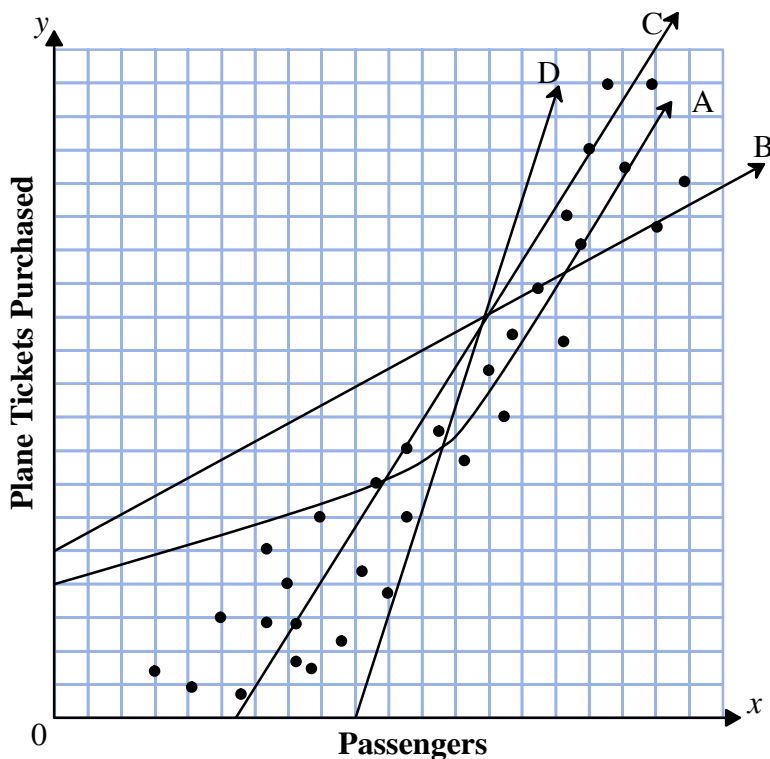
**Use the figure below to answer question 37.**



(Not drawn to scale.)

**37.** What is the value of $x$ if the perimeter of the figure shown above is 36?

    A.    2

  \* B.    3

    C.    4

    D.    5

**Use the graph below to answer question 38.**



**38.** Which is the most reasonable line of best fit for the scatterplot shown above?

    A.   A

    B.   B

  * C.   C

    D.   D

**39.** Lots O' Videos charges a $20 annual membership fee and $1.50 for each video rented. Video House only charges $9 for membership, but they charge $2 for each video rented. If the cost at both stores was the same, which equation could be used to determine the number of videos rented ($v$)?

    A.   $1.50 + 20v = 2 + 9v$

    B.   $3.50v = 29$

  * C.   $20 + 1.50v = 9 + 2v$

    D.   $v = 29 + 3.50v$

**40.** Which of the following expressions is equivalent to $3x + 7x$?

    A.   $10x^2$

  * B.   $10x$

    C.   $21x$

    D.   $3x(1 + 4x)$

**RELEASED MATERIALS. MAY BE DUPLICATED.**

**41.** Which of the following numbers is **not** a prime number?

   A.    3

   B.    5

 * C.    6

   D.   17

**42.** A science class conducted an experiment in which a solution with a boiling point of $112°F$ was left in a car on a sunny day. At 8:00 A.M., the temperature was $84°F$. The class found the temperature increased $8°F$ per hour.  At what time would the solution reach the boiling point?

   A.   11:00 A.M.

 * B.   11:30 A.M.

   C.   12:00 P.M.

   D.   3:30 P.M.

**Use the plot below to answer question 43.**

| | |
|---|---|
| 6 | 3  3 |
| 7 | 0 |
| 8 | 8 |
| 10 | 0  0 |
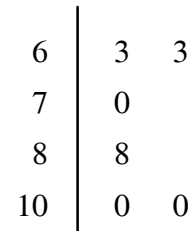
**43.** Which set of data was used to construct the stem-and-leaf plot shown above?

   A.   63, 63, 70, 88, 100

   B.   63, 63, 70, 88, 88, 100

 * C.   63, 63, 70, 88, 100, 100

   D.   70, 88, 100, 100, 633

**44.** What is the domain of the following set of ordered pairs?

$$\{(0, 4), (1, 5), (2, 12), (3, 31)\}$$

   A.   {4, 5, 12, 31}

   B.   {4, 6, 14, 34}

   C.   {2, 3, 4, 5}

 * D.   {0, 1, 2, 3}

**45.** Simplify the expression:

$$(18x^3 + 25x^2 + 12x + 100) - (9x^3 + 6x^2 + 12x)$$

* A.    $9x^3 + 19x^2 + 100$

  B.    $27x^3 + 31x^2 + 24x + 100$

  C.    $9x^3 + 31x^2 + 12x + 100$

  D.    $27x^3 + 19x^2 + 100$

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**46.** Jim works in a sporting goods store. He earns an hourly wage plus commission. One week last October, Jim worked for 15 hours and earned $72.50 in commission. If his total earnings were $166.25, which equation can be used to determine Jim's hourly wage?

  A.    $72.50x + 15 = 166.25$

* B.    $15x + 72.50 = 166.25$

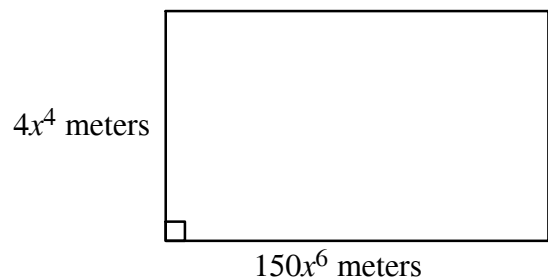  C.    $15x - 72.50 = 166.25$

  D.    $15x + 166.25 = 72.50$

**Use the formula below to answer question 47.**

$$\text{Surface Area} = 6 \times (\text{edge})^2$$

**47.** The surface area of a cube is 384. What is the length of one edge?

  A.    3

* B.    8

  C.    $10\frac{2}{3}$

  D.    18

**Use the figure below to answer question 48.**



$4x^4$ meters

$150x^6$ meters

**48.** What is the area of the rectangle above?

  A.    $154x^{10}$ m$^2$

  B.    $154x^{24}$ m$^2$

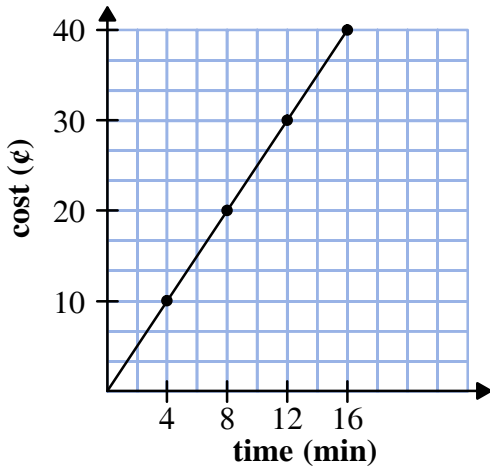* C.    $600x^{10}$ m$^2$

  D.    $600x^{24}$ m$^2$

**49.** Tom is paid 2 cents on his first day of work. His pay doubles each succeeding day. How much will Tom earn on his fifth day of work?
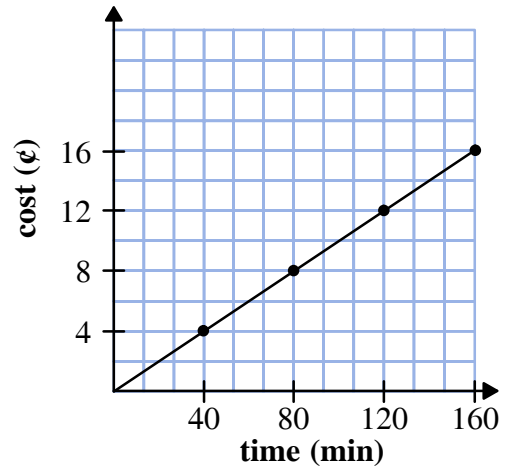
  A.    4¢

  B.    10¢

  C.    25¢

* D.    32¢

**50.**   A telephone company charges 10¢ per minute for long distance phone calls.  Which graph represents a 16-minute long distance phone call from Charlotte to Chicago?
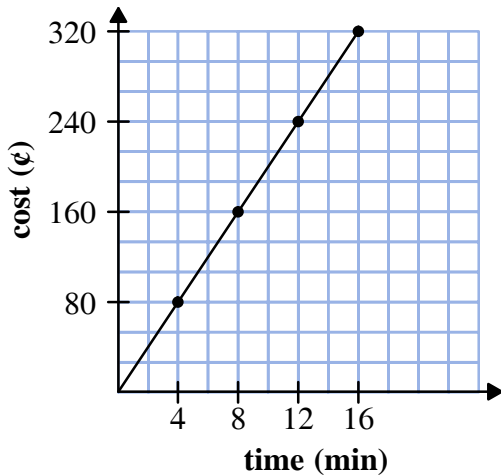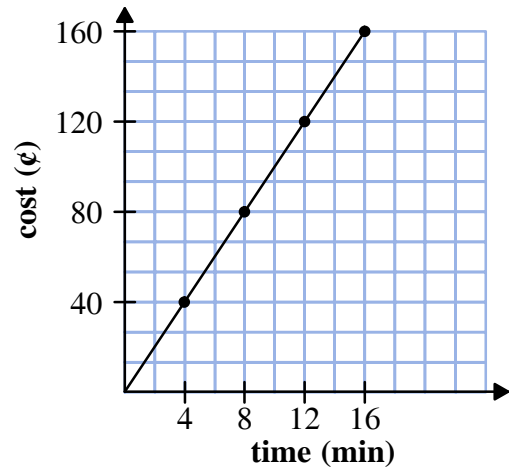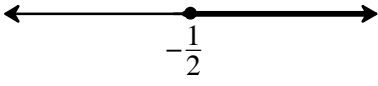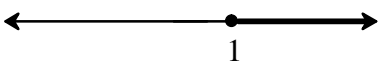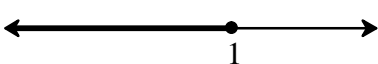
A.



B.



C.



* D.

**51.** What is the greatest common factor in the polynomial below?

$$2a^4b + 6a^2b^2 - 10ab^2$$

   A.    $2a^2$

\* B.    $2ab$

   C.    $ab$

   D.    $2a^2b$

**52.** Today Mary has 6 less than one half the number of marbles she had yesterday. Which expression represents the number of marbles Mary has today?

   A.    $m - 3$

   B.    $2m - 3$

   C.    $6 - \dfrac{m}{2}$

\* D.    $\dfrac{m}{2} - 6$

**53.** Solve and graph: $-4x - 3 \le -1$

\* A.



   B.



   C.



   D.



**54.** Which of the following is the graph of a function?

   A.



\* B.



   C.



   D.



**RELEASED MATERIALS. MAY BE DUPLICATED.**
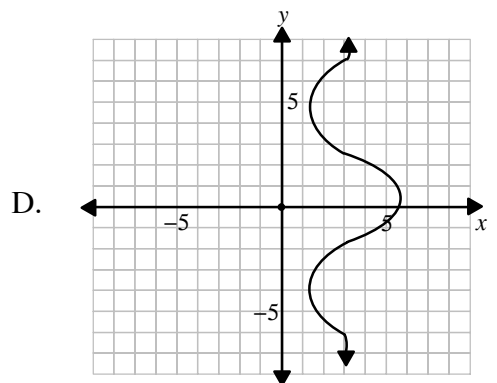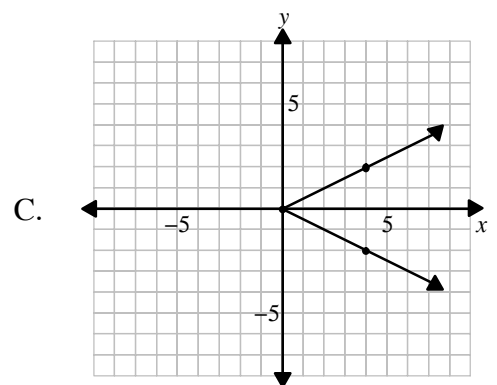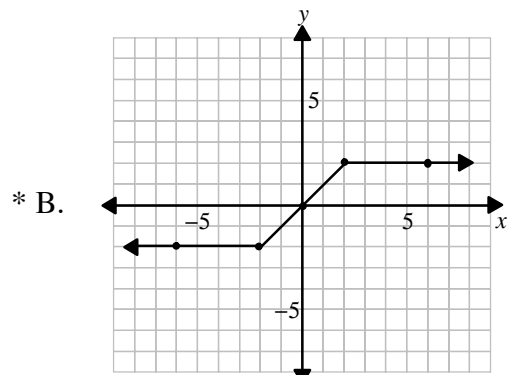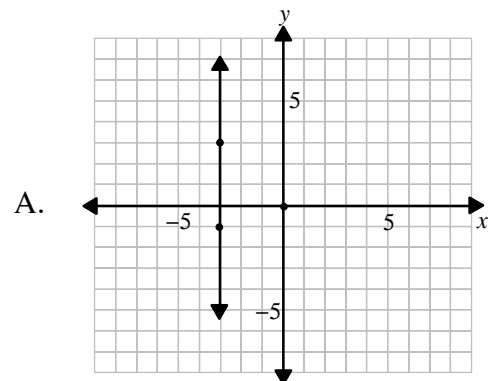
**Use the matrix below to answer question 55.**

**Bill's Clothes Barn**

|  | Solid | Striped | Plaid |
|---|---|---|---|
| Shirts | 8.00 | 16.00 | 26.00 |
| Slacks | 12.00 | 21.00 | 33.00 |

**55.** The matrix above represents the prices Bill's Clothes Barn paid for shirts and slacks. The store increases these prices 75% before selling them to customers. Which matrix represents the selling prices of the shirts and slacks?

A.

| 6.00 | 12.00 | 19.00 |
|---|---|---|
| 9.00 | 15.75 | 24.75 |

B.

| 2.00 | 4.00 | 6.50 |
|---|---|---|
| 3.00 | 5.25 | 8.25 |

\* C.

| 14.00 | 28.00 | 45.50 |
|---|---|---|
| 21.00 | 36.75 | 57.75 |

D.

| 10.00 | 20.00 | 32.50 |
|---|---|---|
| 15.00 | 26.25 | 41.25 |

**56.** Principal Greene has received a $1,500 grant to buy new printers at his school. He has a choice between $50 color printers and $130 high-resolution laser printers. He wants at least 20 new printers. If $C$ represents the number of color printers and $L$ represents the number of laser printers, which set of inequalities correctly models the situation?

\* A. $\begin{cases} 50C + 130L \leq 1,500 \\ C + L \geq 20 \end{cases}$

B. $\begin{cases} 50C + 130L \geq 1,500 \\ C + L \leq 20 \end{cases}$

C. $\begin{cases} 50C + 130L \leq 20 \\ C + L \geq 1,500 \end{cases}$

D. $\begin{cases} 50C + 130L \geq 20 \\ C + L \leq 1,500 \end{cases}$

**Use the information below to answer question 57.**

| Mohammed | 21 in. | Tiffany | 28 in. |
|---|---|---|---|
| Shannon | 22 in. | Veronica | 22 in. |
| Danielle | 25 in. | Saida | 23 in. |
| Derrick | 28 in. | Lamar | 28 in. |

**57.** Eight students measured the distance between each of his or her steps when walking. The results are shown above. What is the median of the data?

A. 23.5

\* B. 24

C. 24.6

D. 28

**58.** Which function has −3 and 2 as zeros?

A.



B.



C.



* D.
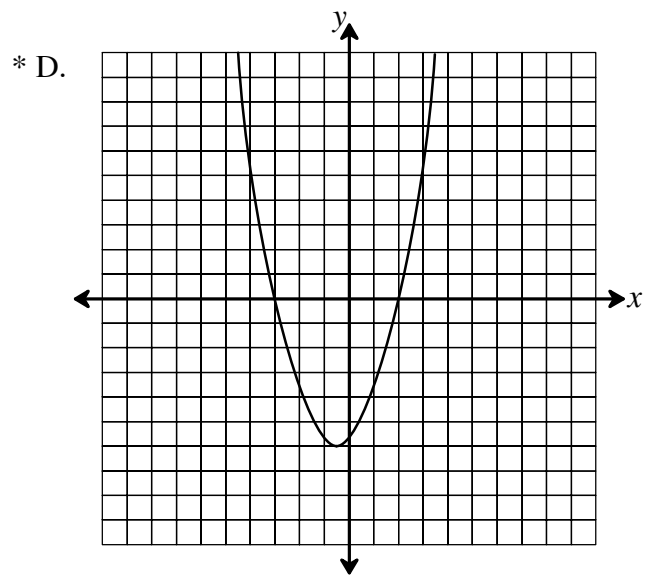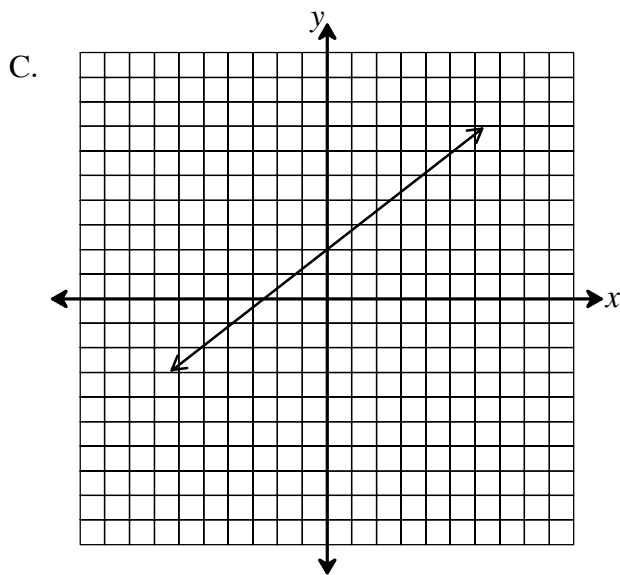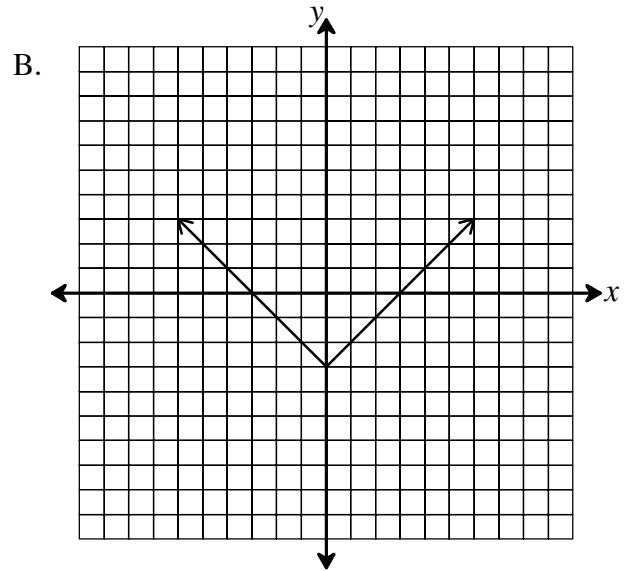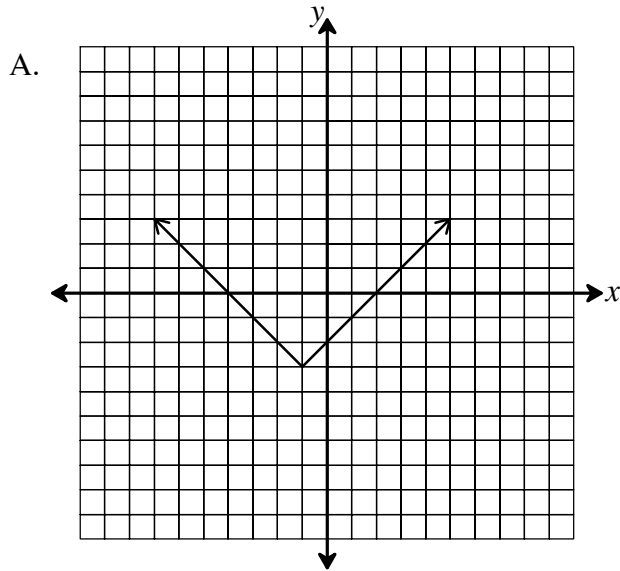


**59.** Simplify:

$$-2x(x^2 - x - 4)$$

A.    $x^2 - 3x - 4$

B.    $x^2 - 7x$

* C.    $-2x^3 + 2x^2 + 8x$

D.    $2x^3 - 2x^2 - 8x$

**60.** How is $1.811 \times 10^4$ written in standard notation?

A.    0.0001811

B.    7.244

C.    10.76

* D.    18,110

## CALCULATOR PERMITTED ON ALL ITEMS

### ALGEBRA I OPEN-RESPONSE ITEM A

**A.** A camper can be rented for $150 for the first day plus $110 for each additional day.  The table below shows the rates for renting the camper.

| Number of Days | Total Cost |
|----------------|------------|
| 1 | $150 |
| 2 | $260 |
| 3 | $370 |
| 4 | $480 |
| 5 | |
| 6 | |

1. Copy and complete the table above in your Student Answer Document.  Show or explain all of your work even if you use mental math or a calculator.

2. Let *C* represent the cost of renting the camper for *d* days.  Write the equation for the cost of renting the camper.  Explain all of your work.

3. The camper can be purchased for $5,400.  Your family is planning a 45-day trip.  Determine whether renting or buying the camper is the least expensive option.  Show or explain all of your work even if you use mental math or a calculator.

BE SURE TO LABEL YOUR RESPONSES (1), (2), AND (3).

## ALGEBRA I OPEN-RESPONSE ITEM B

**B.** A charcoal grill is designed to have the largest possible square-shaped cooking surface to fit inside the hemispherical container. The top view of the grill is shown below. The cooking surface is ABCD.
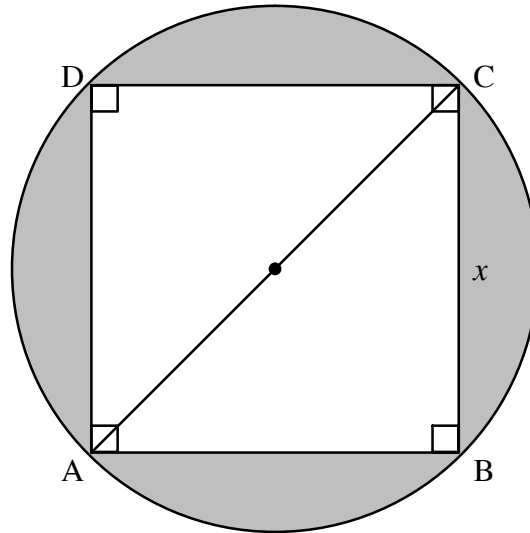


1.      Henry needs to know the distance from A to C in order to determine how much food will fit on the grill. He finds that the radius of the circle is 12 inches. Determine the distance from A to C. Show or explain all of your work even if you use mental math or a calculator. Be sure to show units.

2.      Find the length, $x$, of each side of the square rack. Show or explain all of your work even if you use mental math or a calculator. Be sure to show units. You may find it helpful to use a sketch.

3.      Henry wants to cover the metal grill with cooking foil. Determine if his $1\frac{1}{4}$ ft. by $1\frac{1}{4}$ ft. piece of foil will cover the square-shaped cooking surface. Show or explain all of your work even if you use mental math or a calculator. Be sure to show units.

BE SURE TO LABEL YOUR RESPONSES (1), (2), AND (3).

## ALGEBRA I OPEN-RESPONSE ITEM C

**C.**   Tanya's Jewelry Shop sells several types of rings and earrings.  The number of items Tanya orders for January is represented in the matrix below.

**January Order**

|          | Silver | Gold | Pearl |
|----------|--------|------|-------|
| Rings    | 32     | 45   | 40    |
| Earrings | 50     | 42   | 60    |

1.   In February, Tanya decides to order 60% of her January order.  Write a matrix that represents her February order.  Be sure to include a title as well as labels for each row and each column.  Show all of your work even if you use mental math or a calculator.

2.   In March, Tanya decides to order $\frac{5}{4}$ of her January order.  Write a matrix to represent her March order.  Be sure to include a title as well as labels for each row and each column.  Show all of your work even if you use mental math or a calculator.

3.   Using the matrices above, determine Tanya's total orders for the quarter (January, February, and March).  For your final matrix, be sure to include a title as well as labels for each row and each column.  Show all of your work even if you use mental math or a calculator.

BE SURE TO LABEL YOUR RESPONSES (1), (2), AND (3).

## RELEASED MATERIALS. MAY BE DUPLICATED.

## ALGEBRA I OPEN-RESPONSE ITEM D

**D.**   Mammoth Spring is one of the nation's largest springs.  Water flows from it at a rate of about 9.78 million gallons per hour.

1.   Determine how many gallons of water flow from the spring in one minute.  Express your answer in scientific notation.  Show or explain your work even if you use mental math or a calculator.

2.   Determine how many gallons of water flow from the spring in one year.  (One year $\approx$ 365 days.)  Express your answer in scientific notation.  Show or explain your work even if you use mental math or a calculator.

3.   At Hot Springs Mountain, the springs have a total daily flow of about 850,000 gallons.  How much more water flows **daily** from Mammoth Spring than from the springs at Hot Springs Mountain?  Express your answer in scientific notation.  Show or explain your work even if you use mental math or a calculator.

BE SURE TO LABEL YOUR RESPONSES (1), (2), AND (3).

## ALGEBRA I OPEN-RESPONSE ITEM F

**F.** To demonstrate to her algebra class that information can be represented as a graph, Kirsten recorded data as she rode in the car with her mother. She recorded the distance and the time for several portions of a trip. The car traveled at a constant rate of speed. She found:

- After starting, they rode for 6 minutes until reaching the grocery store that was 4 miles from home.
- They stopped and spent 12 minutes in the store.
- After returning to the car, they traveled 12 more minutes until they reached the gas station. The gas station was 6 miles farther from home than the grocery store.
- They spent 6 minutes putting gas into the car.
- After leaving the gas station, they headed home. They rode for 9 minutes and traveled 5 miles toward home before stopping at the post office.
- They spent 3 minutes mailing a letter at the post office.
- After leaving the post office, Kirsten and her mother traveled 6 more minutes before arriving home.

Carefully copy the coordinate axes below onto the grid in your Student Answer Document. Be certain to include the units on each axis. On the coordinate system, draw a line graph to represent the trip. Clearly label the graph by writing the location of Kirsten and her mother (home, grocery store, gas station, post office) used to represent each portion of the trip on or near the correct section of the graph.
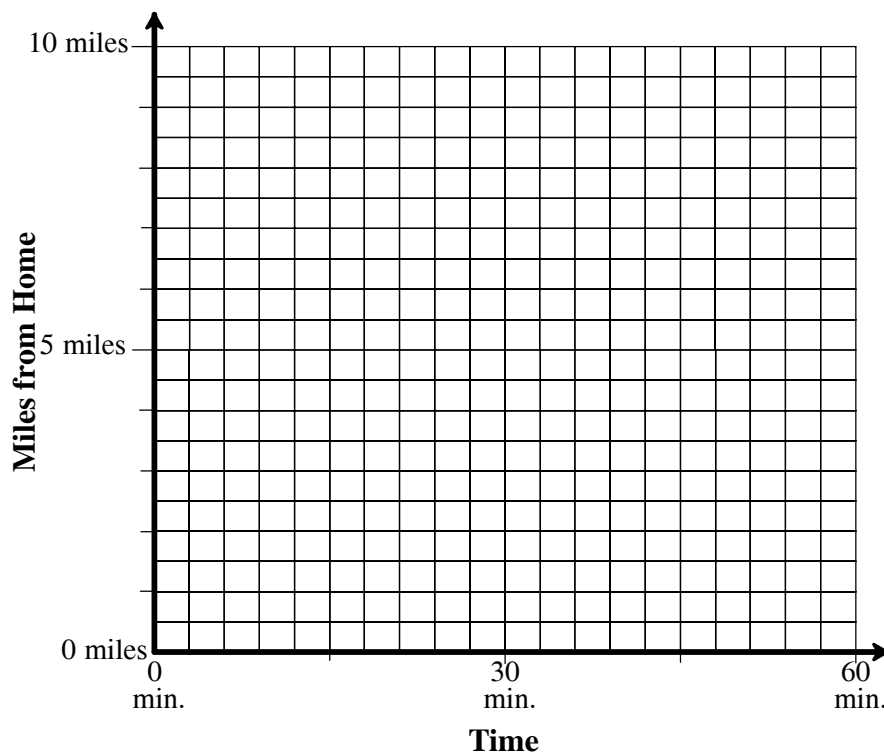
## Released Items for Algebra I *

| Item | Content Standard/Goals | Expectation | | Item | Content Standard/Goals | Expectation |
|------|------------------------|-------------|---|------|------------------------|-------------|
| 1 | 1 | 3 | | 34 | 4 | 4 |
| 2 | 3 | 4 | | 35 | 5 | 3 |
| 3 | 2 | 4 | | 36 | 1 | 6 |
| 4 | 3 | 1 | | 37 | 2 | 4 |
| 5 | 4 | 1 | | 38 | 3 | 3 |
| 6 | 5 | 4 | | 39 | 4 | 6 |
| 7 | 1 | 1 | | 40 | 5 | 1 |
| 8 | 2 | 1 | | 41 | 1 | 2 |
| 9 | 3 | 2 | | 42 | 2 | 1 |
| 10 | 4 | 2 | | 43 | 3 | 4 |
| 11 | 1 | 5 | | 44 | 4 | 2 |
| 12 | 5 | 3 | | 45 | 5 | 1 |
| 13 | 2 | 3 | | 46 | 1 | 4 |
| 14 | 3 | 3 | | 47 | 2 | 4 |
| 15 | 4 | 3 | | 48 | 2 | 4 |
| 16 | 5 | 2 | | 49 | 1 | 7 |
| 17 | 1 | 6 | | 50 | 3 | 3 |
| 18 | 2 | 2 | | 51 | 5 | 2 |
| 19 | 4 | 5 | | 52 | 1 | 5 |
| 20 | 5 | 3 | | 53 | 2 | 2 |
| 21 | 2 | 1 | | 54 | 4 | 3 |
| 22 | 1 | 2 | | 55 | 3 | 2 |
| 23 | 3 | 3 | | 56 | 4 | 6 |
| 24 | 4 | 1 | | 57 | 3 | 4 |
| 25 | 5 | 4 | | 58 | 4 | 4 |
| 26 | 1 | 3 | | 59 | 5 | 1 |
| 27 | 2 | 4 | | 60 | 5 | 4 |
| 28 | 3 | 1 | | A | 1 | 5 |
| 29 | 4 | 3 | | B | 2 | 4 |
| 30 | 5 | 2 | | C | 3 | 2 |
| 31 | 1 | 5 | | D | 5 | 4 |
| 32 | 2 | 1 | | F | 4 | 6 |
| 33 | 3 | 4 | | | | |

*Only the predominant Content Standard/Goals and learning expectation is listed for the Algebra I items.