

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|---|---|---|---|---|---|---|
| <h1>APRIL 2016</h1> <h2>ALGEBRA 2</h2> | | | | | 1 | 2 |
| | | | | | Factor $x^3 + x^2 - x - 1$ | Find the value of $z + x - y$ where x , y , & z are the solutions to the system below. $\begin{cases} -3x - y + z = 14 \\ x + 2y + 3z = 2 \\ -2x - y - 2z = 2 \end{cases}$ |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Find the largest value of x that satisfies the equation $3x^2 = -21 + 16x$ | State the range of the graph in Figure #4 on the back. | The square of a number is decreased by 15. This value is twice the original number. What is the largest such number? | Simplify $\frac{2\sqrt{126}}{\sqrt{14}}$ | Simplify $\frac{\sqrt{-3}}{\sqrt{21}}$ | Lucy charges \$12 to rent a bike & averages 24 rentals/day. For each 50¢ increase in price, she loses 3 rentals. How much should she charge to maximize profit? | Solve for x . $x^2 - 18x + 162 = 0$ |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Simplify $x^{-2}(16x^4y^6)^{-2}$ What is the exponent of x ? | Line L goes through (6, 5) and (9, 4). What is the y -intercept of the line through the point (12, 7) and parallel to L ? | Find the remainder when dividing $x^3 + 2x^2 - 5x + 6$ by $x + 1$. | Factor $x^3 + 13x^2 - 169x - 2197$ | Simplify $10\left(\frac{x^5}{y^2}\right)^2$ What is the sum of the exponents of x and y ? | Factor $x^4 - 50625$ | Solve for x . $x^2 - 32x + 256 = 0$ |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| Find the x -intercepts of the graph represented by $f(x) = x^2 - 8x + 7$ | Line L goes through (1, 5) and (12, 16). What is the y -intercept of the line perpendicular to L through (7, 11)? | One leg of a right triangle exceeds the other by 4 in. The hypotenuse is 30 in. How long is the smallest side? Round your answer to the nearest whole number. | Find the remainder when dividing $8x^2 - 5x + 7$ by $x + 1$. | Bob's paint company charges \$200 for prep work and \$15 per hour to paint a house. Carla charges \$53 for prep and \$22 per hour. After how many hours are the two equal in price? | Solve for x . $-3(x + 4) + 5 < -73$ | What is the greatest element of the range of Figure #23 on the back. Is it a function? |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Find the vertex of the graph represented by $f(x) = (x - 2)^2 + 4$ | Write the equation of the line through the points (6, 49) and (3, 37). What is the y -intercept of the line? | Solve for x . $x^3 - 26x^2 - 676x + 17576 = 0$ | Factor $x^2 - 729$ | A company's profit (in billions) after x months in the year is given by $f(x) = \frac{1}{2}x^3 - 2x^2 + 5x - 9.5$ How much profit will the company have after May? | The sum of two consecutive whole numbers is 59. Write and solve equation to find the smaller number. | Find the y -intercept of the graph represented by $f(x) = 3x^2 - 10x + 30$ |

Figure #4

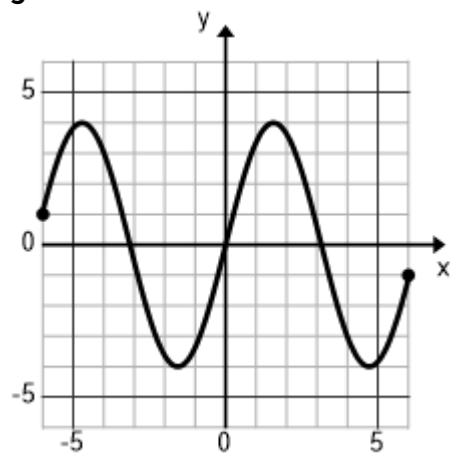


Figure #23

