# Algebra I Instructional Support

Daily Task: Review class notes related to each unit. Complete the three review questions designated for each day. Show all work on a separate piece of paper.

| | Question 1 | Question 2 | Question 3 |
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| Day One:<br>Unit 1 | SOL A.3b<br>A student claims that $\sqrt[3]{80}$ is in simplest radical form. Are they correct? Explain why or why not. | SOL A.1a<br>Rob had 3 less than twice as many problems for homework on Tuesday than on Monday. If *m* represents the number of homework problems on Monday, write an expression that represents the number of homework problems Rob had on Tuesday? | SOL A.1b<br>Evaluate<br>$3(a^3 + b^2)$ for $a = 2, \quad b = 4$. |
| Day Two:<br>Unit 2 | SOL A.4a<br>What value of *p* will make the equation $\frac{4p}{4} - \frac{2p}{3} = 10$ true? | SOL A.4c<br>Solve the equation for *k*.<br>$h = \frac{4}{k} + n$ | SOL A.4e<br>A plumber uses the equation $c = 35h + 70$ to determine the total amount of money charged for a service call, where *h* represents the number of hours worked and 70 represents a one-time fee. Based on this equation, how much should she charge for working 1.5 hours on a service call when no parts are required? |
| Day Three:<br>Unit 3 | SOL A.5a<br>What is the solution for *n* in the inequality?<br>$-17 + 3n \leq 7(n - 2)$ | SOL A.5a<br>For which values of *x* is the inequality $2x + 19 \geq 3x - 19$ true? | SOL A.5c<br>Gabriel needs to purchase AT LEAST 30 party decorations. The Party Palace charges \$0.50 per decorative streamer and \$0.25 per balloon, including tax. Which combination of streamers and balloons can Gabriel purchase with \$12.50 at the Party Palace? |
| Day Four:<br>Unit 4 | SOL A.7a<br>The sets of ordered pairs below represent relations.<br>I {(0, 0), (1, 1), (2, 2)}<br>II {(1, 2), (2, 1), (1, 3)}<br>III {(0, 2), (3, 4), (3, 6)}<br>IV {(1, 6), (2, 6), (3, 6)}<br>Which of these sets are also functions? | SOL A.7b<br>What is the range of the quadratic function<br>$y = 5(x - 4)^2$? | SOL A.7c<br>Write the equation of a quadratic function with real solutions of 7, and -8. |

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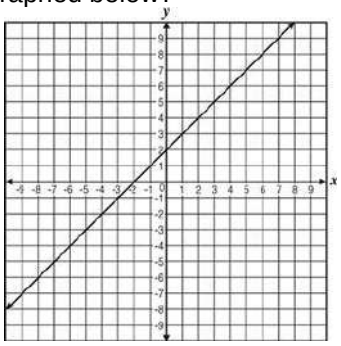
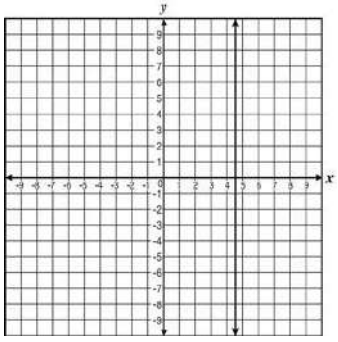
| Day Five:<br>Unit 4 | SOL A.7d<br>Given the equation $-2x + 3y = 18$, what are the *x*-intercept and *y*-intercept of the graph? | SOL A.7e<br>If $f(x) = 3x - 4$, what is $f\left(\frac{2}{3}\right)$? | SOL A.7f<br>A photocopier tray is filled with 500 sheets of paper. Photocopies are then made for the next 2 minutes. Which term BEST describes the slope of a line graph representing the sheets of paper remaining in the tray? |
| Day Six:<br>Unit 5 | SOL A.6a<br>What is the slope of a line that contains the ordered pairs $(2, 6)$ and $(3, 9)$? | SOL A.6c<br>Which point is on the graph of $y = 2x + 5$ in the coordinate plane? | SOL A.5a<br>Use a graphing utility to determine which values of n is the inequality $n + 8 > -8 - n + 18$ true? |
| Day Seven:<br>Unit 5 | SOL A.5b<br>Graph the solution set for the following inequality?<br>$2x - y < 2$ | SOL A.5c<br>Write a real-world problem that corresponds to the inequality below.<br>16x + 40 ≤ 120 | SOL A.5d<br>Graph the solution to the system of inequalities below?<br>$\begin{cases} y \leq 2x + 7 \\ y \leq -x - 2 \end{cases}$ |
| Day Eight:<br>Unit 6 | SOL A.6b<br>What is the equation of the line graphed below?<br>  | SOL A.6b<br>Which equation is represented by the graph below?<br>  | SOL A.6b<br>Which equation represents the line that passes through the points $(3, 7)$ and $(-1, -1)$? |
| Day Nine:<br>Unit 6 | SOL A.6b<br>What is the equation of the line that contains point $(3, -2)$ and has a slope of 5? | SOL A.6b<br>Which equation has a slope of $-1$ and an *x*-intercept of 2? | SOL A.9<br>If *p* represents the world population in billions and *y* represents the number of years after 1960, then the world population after 1960 can be closely approximated by the equation $p = 0.077y + 3.04$. Which number most closely approximates the predicted population of the world, in billions, in the year 2015? |
| Day Ten:<br>Unit 7 | SOL A.8<br>Describe the graph representing a direct variation? | SOL A.8<br>Write a real word situation which describes a direct variation. | SOL A.8<br>The number of possible string sections (*s*) to be cut from a 4-inch piece of string varies inversely with the length (*l*) of each of these string sections. Write an equation which models this relationship? |

| EMERGENCY CLOSING LEARNING PLAN<br>**ALGEBRA I**<br>TEXTBOOK LOGIN INFORMATION |
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| RESOURCES |
| Big Ideas Online Resources<br>Access through Clever<br><br>https://clever.com/in/acps001 |
| Khan Academy<br>**khanacademy.org** |
| Textbook |