SYSTEMS - 5.4

5.4

READY, SET, GO!

Name

Period

Date

READY

Topic: Writing linear equations in standard form and slope-intercept form.

Rewrite the given equation so that they are in slope-intercept form. (y = mx + b)

1.
$$7x - 14y = -56$$

$$2. -8x - 2y = 6$$

3.
$$15x + 9y = 45$$

Rewrite the given equations so that they are in standard form.

(Ax + By = C, where A, B, and C are whole numbers and A is positive.)

4.
$$y = 7x - 3$$

5.
$$y = 2x + 9$$

6.
$$y = -4x - 11$$

7.
$$y = \frac{1}{2}x + 8$$

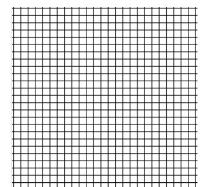
8.
$$y = \frac{3}{5}x - 2$$

9.
$$y = -\frac{1}{6}x + \frac{2}{3}$$

SET

Topic: Writing inequalities from a real world problem. Graphing inequalities.

- 10. On a final for a creative writing course, Ben was required to write a combination of at least 10 poems or paragraphs. Ben knew that each poem would take him 30 minutes to write while a paragraph would only take 10 minutes. Ben was given two hours to complete the exam.
 - a. Write an inequality to model each constraint. (Hint: One constraint is time and the other is the number of needed items. Let x be the number of poems written and y be the number of paragraphs written.)
 - b. Graph each inequality on a separate coordinate grid and shade the solution set for each.



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GO

Topic: Substituting a value to check if it's a solution

Determine whether h = 3 is a solution to each problem.

11.
$$3(h-4)=-3$$

12.
$$3h = 2(h+2) - 1$$

13.
$$2h - 3 = h + 6$$

14.
$$3h > -3$$

15.
$$\frac{3}{5} \le h \times \frac{1}{5}$$

$$16. \qquad \frac{3}{5} > h \times \frac{1}{6}$$

Determine the value of *x* that makes each equation true.

17.
$$4x - 2 = 8$$

18.
$$3(x+5) = 20$$

19.
$$2x + 3 = 2x - 5$$

20.
$$4(6x - 1) = 3(8x + 5) - 19$$