





4.

Name

y = 2x

x + y = 0

Solving Systems of Equations: Light Up the Tree!

Date

Class



Directions: Solve the following problems on a separate sheet of paper. After solving a problem, then find the answer on the right. Color the numbered object

according number of the problem and the color of the answer.			
1.	x + 3 = y	No Solution → Green	
	2x + y = 12	140 Solution — Green	
2.	4x - 4y = 20		

1.
$$x+3=y$$

 $2x+y=12$
2. $4x-4y=20$
 $2x+4y=28$
No Solution \longrightarrow Green
 $(1,-5)$ \longrightarrow Purple

$$2x + y = 12$$

2. $4x - 4y = 20$
 $2x + 4y = 28$

3. $x - y = 6$

No Solution Green

(1, -5) Purple

2.
$$4x-4y=20$$

 $2x+4y=28$
3. $x-y=6$
 $5x+2y=5$
(1,-5) Purple
(-4,8) Blue

2.	4x - 4y = 20	(1 5) Dumple
	2x + 4y = 28	(1, -5) > Purple
3.	x - y = 6	(4 0) -
	5x + 2y = -5	(-4, 8) > Blue

$$2x - y = 10$$

$$5. \quad 7x - 3y = 23$$

$$-5x + 2y = -12$$

$$6. \quad x = -4$$

$$2x + 5y = 32$$

$$(3,6) \longrightarrow Gray$$
Infinitely Many \limits Light Blue

5.
$$7x-3y=23$$

 $-5x+2y=-12$

1. Infinitely Many Light Blue
$$x=-4$$

$$2x+5y=32$$

1. (2,-1) Orange

5.
$$7x-3y=23$$

 $-5x+2y=-12$

Infinitely Many Light Blue

6. $x=-4$
 $2x+5y=32$

(2,-1) Orange

7. $-2x+3y=8$

$$2x + 5y = 32$$
7. $-2x + 3y = 8$
 $-4x + 3y = -2$
(8,3) Pink

$$3x - 5y = 22$$
 $-9x + 15y = -66$
(-2,2) Light Green

$$9x - 2y = 20$$

9. 9x - 2y = 20(5,6)Red 2x + y = 310. -x = -y + 4(-10, -31) > Yellow



Name____Key_

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Directions: Solve the following problems on a separate sheet of paper. After solving a problem, then find the answer on the right. Color the numbered object

according number of the problem and the color of the answer.		
1.	x+3 = y $2x+y=12$ Gray	No Solution → Green
2.	4x - 4y = 20 $2x + 4y = 28$ Pink	(1, -5) → Purple
3.	x - y = 6 Purple $5x + 2y = -5$	(-4, 8) Blue

	2x + y = 12	740 001411011
2.	4x - 4y = 20 $2x + 4y = 28$ Pink	(1, -5) > Purple
	2x + 4y = 28	(1, -3) — Purple
3.	x - y = 6 Purple	(1 9) — Dlue
	5x + 2y = -5	(-4, 8) 🗪 Blue

2.
$$4x-4y=20$$

 $2x+4y=28$ Pink
3. $x-y=6$ Purple
 $5x+2y=-5$ Purple
(-4, 8) \implies Blue

Pink
$$2x + 4y = 20$$

$$2x + 4y = 28$$

$$3. \quad x - y = 6$$

$$5x + 2y = -5$$
Purple
$$(-4, 8) \implies \text{Blue}$$

4.
$$y = 2x$$
 Green
$$2x - y = 10$$
5. $7x - 3y = 23$ Yellow
$$-5x + 2y = -12$$
6. $x = -4$ Blue
$$2x + 5x = 22$$

$$(3,6) \longrightarrow Gray$$
Infinitely Many Light Blue
$$(2,-1) \longrightarrow Orange$$

$$2x - y = 10$$
5. $7x - 3y = 23$ Yellow
$$-5x + 2y = -12$$
6. $x = -4$ Blue
$$2x + 5y = 32$$
7. $-2x + 3y = 8$ Red
$$-4x + 3y = -2$$
(8,3) Fray
Infinitely Many Light Blue
$$(2, -1) \implies Orange$$

5.
$$7x-3y=23$$
 Yellow $-5x+2y=-12$ Infinitely Many Light Blue $2x+5y=32$ (2,-1) Orange $7x-3y=8$ Red $-4x+3y=-2$ (8,3) Pink $3x-5y=22$ Light Blue $-9x+15y=-66$ (-2,2) Light Green $9x-2y=20$ (5,6) Red

5.	x = -4 Blue $2x + 5y = 32$	(2,-1) → Orange
7.	-2x + 3y = 8 Red $-4x + 3y = -2$	(8,3) → Pink
8.	3x - 5y = 22 Light Blue $-9x + 15y = -66$	(-2,2) Light Green
9.	9x - 2y = 20 $2x + y = 3$ Orange	(5,6) Red
10.	-x = -y + 4 $x + y = 0$ Light Green	(-10, -31) → Yellow

