

Class Name : 8A - A

Instructor Name : Ms. Ryan

Student Name : \_\_\_\_\_

Instructor Note : \_\_\_\_\_

1. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$y = -5x + 7$	<input type="radio"/>	<input type="radio"/>
$y = x$	<input type="radio"/>	<input type="radio"/>
$y = 4x^2 + 5$	<input type="radio"/>	<input type="radio"/>
$y = -9$	<input type="radio"/>	<input type="radio"/>

2. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$y = x^3$	<input type="radio"/>	<input type="radio"/>
$y = x^2 - 6$	<input type="radio"/>	<input type="radio"/>
$y = -x + 3$	<input type="radio"/>	<input type="radio"/>
$y = -7x$	<input type="radio"/>	<input type="radio"/>

3. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$y = -2x^3$	<input type="radio"/>	<input type="radio"/>
$y = x + 9$	<input type="radio"/>	<input type="radio"/>
$y = 4^x$	<input type="radio"/>	<input type="radio"/>
$y = x^2 + 2$	<input type="radio"/>	<input type="radio"/>

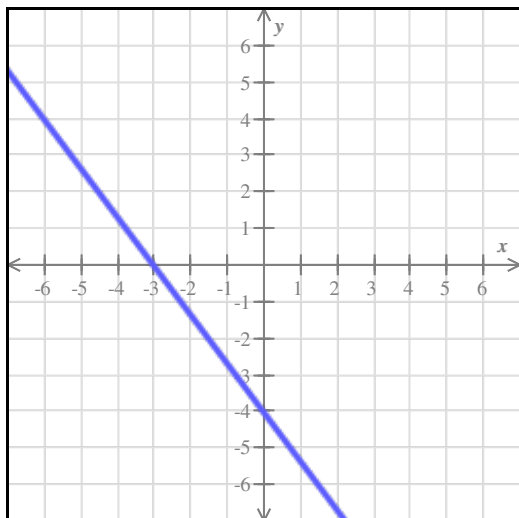
4. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$0.09x - 0.5y = 2.2$	<input type="radio"/>	<input type="radio"/>
$y + \frac{7}{x} = 0$	<input type="radio"/>	<input type="radio"/>
$5x - 8 + 9y = x - 7$	<input type="radio"/>	<input type="radio"/>
$-5x = 9$	<input type="radio"/>	<input type="radio"/>

5. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$3x - 7 + 8y = y - 4$	<input type="radio"/>	<input type="radio"/>
$x^3 - 2y = 4$	<input type="radio"/>	<input type="radio"/>
$\frac{3x}{4} - \frac{y}{5} = 6$	<input type="radio"/>	<input type="radio"/>
$8xy + 4y = 7$	<input type="radio"/>	<input type="radio"/>

6. Find the  $x$ -intercept and the  $y$ -intercept of the line below.



7. Find the  $y$ -intercept and  $x$ -intercept of the line.

$$-x + 4y = 8$$

$y$ -intercept: \_\_\_\_\_

$x$ -intercept: \_\_\_\_\_

8. Find the  $y$ -intercept and  $x$ -intercept of the line.

$$-2x + 4y = 15$$

$y$ -intercept: \_\_\_\_\_

$x$ -intercept: \_\_\_\_\_

9. For each ordered pair, determine whether it is a solution to  $4x + 5y = -13$ .

$(x, y)$	Is it a solution?	
	Yes	No
$(6, 3)$	<input type="radio"/>	<input type="radio"/>
$(-7, 4)$	<input type="radio"/>	<input type="radio"/>
$(8, -9)$	<input type="radio"/>	<input type="radio"/>
$(-2, -1)$	<input type="radio"/>	<input type="radio"/>

10. For each equation, determine whether it is linear.

Equation	Is the equation linear?	
	Yes	No
$\frac{x}{2} - \frac{5y}{3} = 6$	<input type="radio"/>	<input type="radio"/>
$6x + 7 + 9y = y - 3$	<input type="radio"/>	<input type="radio"/>
$-4y = 8$	<input type="radio"/>	<input type="radio"/>
$x = 8xy + 5$	<input type="radio"/>	<input type="radio"/>

11. Linda is saving money to buy a game. So far she has saved \$16, which is one-fourth of the total cost of the game. How much does the game cost?

12. Solve for  $u$ .

$$53 = -\frac{u}{5}$$

Simplify your answer as much as possible.

13. Solve for  $w$ .

$$64 = 4w$$

Simplify your answer as much as possible.

