

LESSON 3.1: PROPORTIONAL vs. NON-PROPORTIONAL RELATIONSHIPS (TEKS 8.5F)

Name: _____

Learning Goal: I can distinguish between proportional and non-proportional relationships using tables, graphs, and equations.
 Meta de Aprendizaje: Puedo distinguir entre las relaciones proporcionales y no proporcionales utilizando tablas, gráficos y ecuaciones.

Language Goal: I can read my notes and then explain why a relationship is proportional or non-proportional.
 Lenguaje Objetivo: Puedo leer mis notas y luego explicar por qué una relación es proporcional o no proporcional.

Directions: Decide if an equation is PROPORTIONAL or NON-PROPORTIONAL. Then, explain why.
 (Decidir si una ecuación es proporcional o no proporcional. Luego, explique por qué.)

1. $y = -5x$

PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

2. $y = 2.5x + 3$

PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

3. $y = \frac{1}{3}x$

PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

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

PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

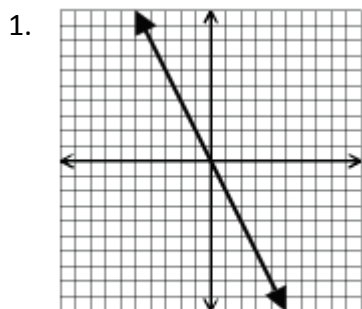
5. $y = 3$

PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

6. $y = 5 - \frac{1}{4}x$

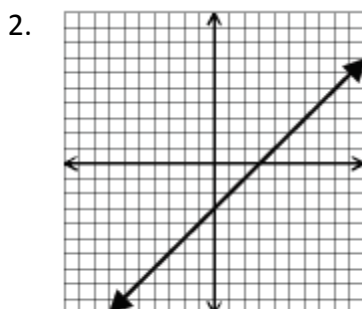
PROPORTIONAL
 OR
 NON-PROPORTIONAL
 Why? _____

Directions: Decide if a graph is PROPORTIONAL or NON-PROPORTIONAL. Then, explain why.
 (Decidir si una gráfica es proporcional o no proporcional. Luego, explique por qué.)



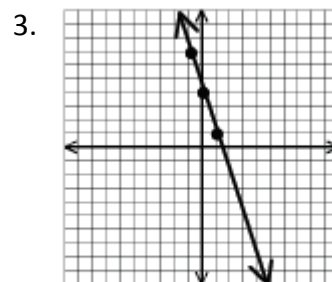
Proportional non-proportional

Why? _____



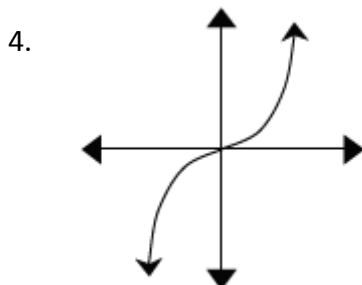
Proportional non-proportional

Why? _____



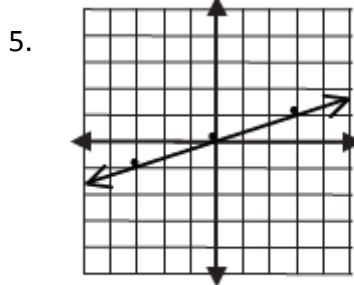
Proportional non-proportional

Why? _____



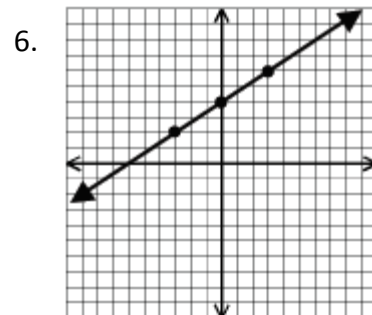
Proportional non-proportional

Why? _____



Proportional non-proportional

Why? _____



Proportional non-proportional

Why? _____

Directions: Decide if a table is PROPORTIONAL or NON-PROPORTIONAL. Then, explain why.

(Decidir si la tabla es proporcional o no proporcional. Luego, explique por qué.)

1.

NUMBER OF HOURS	TOTAL COST (\$)	RATIO: $\frac{y}{x}$
1	\$75	
2	\$120	
3	\$165	
4	\$210	
5	\$255	

Proportional non-proportional

Why? _____

2.

NUMBER OF HOURS	TOTAL COST (\$)	RATIO: $\frac{y}{x}$
1	\$45	
2	\$90	
3	\$135	
4	\$180	
5	\$225	

Proportional non-proportional

Why? _____

3.

Number of Movie Tickets (x)	Total Cost of Tickets (y)	$\frac{y}{x}$
1	-6	
2	-12	
3	-18	
4	-24	

Proportional non-proportional

Why? _____

4.

x	y
1	-3
2	-6
3	-9
4	-12
5	-15

Proportional non-proportional

Why? _____

5.

x	y
-4	-8
-2	-4
0	0
2	4
4	8

Proportional non-proportional

Why? _____

6.

x	y
-1	-1.5
1	1.5
3	4.5
5	7.5
7	10.5

Proportional non-proportional

Why? _____

QUICK REVIEW!

1. Order the following list of numbers in **descending order**.

Ordenar la siguiente lista de números en **orden descendente**.

$$-125\%, \frac{7}{8}, -2\frac{1}{4}, 30\%$$

Tens	Ones	.	Tenths	Hundredths	Thousandths
		.			
		.			
		.			
		.			

2. Solve these equations (Resolver estas ecuaciones):

$$3x - 10 = 6x - 4$$

|

$$5 - x = 2x - 4$$

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