

**LESSON 3.2: PROPORTIONAL vs. NON-PROPORTIONAL RELATIONSHIPS (TEKS 8.5F,H)** Name: \_\_\_\_\_

<p>Learning Goal: I can <u>distinguish</u> between proportional and non-proportional relationships in real-world word problems.</p> <p><i>Meta de Aprendizaje: Puedo <u>distinguir</u> entre las relaciones proporcionales y no proporcionales en problemas del mundo real de la palabra.</i></p>	<p>Language Goal: I can read a word problem, write an equation, and explain why a relationship is proportional or non-proportional.</p> <p><i>Lenguaje Objetivo: Puedo leer un problema de palabras, escribir una ecuación, y explicar por qué una relación es proporcional o no proporcional.</i></p>
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<b>Word Problem</b>	<b>Linear Equation</b> $y = mx + b$	<b>Proportional or Non-Proportional?</b> <b>Why?</b>
A farmer sells fresh peaches for \$0.69 a pound.		
The temperature in the morning was 49°, and it increased by 3°F every hour.		
Each player begins a card game with 20 points and earns 5 points for each correct answer.		
Philip paid \$80, plus \$0.08 per mile, to rent a car for one week.		
After reaching a height of 1,000 feet, an airplane continued to climb at a rate of 2,000 feet per minute.		
At the beginning of football season, John could complete 20 push-ups. Since then, he has increased his number of push-ups by 5 each week.		
Claudia charges \$10 per hour for babysitting, plus a fee of \$15 for travel expenses.		
Time Warner charges a \$50 set-up fee, plus \$60 monthly payments for basic cable and internet.		
A scientist heated water at a rate of 3° per minute. The water started at 40°F.		

A dog kennel charges \$20 per hour to watch your dog.		
Christian's cell phone plan charges \$25 per gigabyte of data used.		
A deli charges \$7.50 for every soup and salad combo.		
A pizza shop charges \$10 for a small cheese pizza, plus \$2 for each additional topping.		
The cost of purchasing fruit for \$1.80 per pound with a coupon for \$1.00 off the total cost.		
The cost for a basket of organs is \$1.50 per pound plus \$5.00 for the basket.		
The cost of purchasing apples is \$1.75 per pound plus a delivery fee of \$0.25 per pound. <b>(Trick question!)</b>		

**QUICK REVIEW!**

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

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

$$-\frac{3}{8}, 2\sqrt{3}, -25\frac{1}{4}\%, 95.2\%$$

Tens	Ones	.	Tenths	Hundredths	Thousandths
		.			
		.			
		.			
		.			

2. Solve these equations (*Resolver estas ecuaciones*):

$$3.5x - 56.5 = -6x - 4.25$$

$$-5 - 3x = x + 20$$

