**Math 8**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Linear Relation Assessment

# 

Big Idea: Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations.

Content:

Linear relations

* Two-variable Linear relations
* Expressions, Table of Values, and Graphs
* Scale Values (e.g., tick marks on axis represent 5 units instead of 1)
* Four quadrants, Integral Coordinates

Expressions

* using an expression to describe a relationship
* evaluating 0.5n – 3n + 25, if n = 14

Curricular Competencies:

Reasoning and Analyzing: Demonstrate and apply mental math strategies.

Understanding and Solving: Visualize to explore mathematical concepts.

Tools Used to Complete Assessment. Check all that apply.

🞏 Multiplication Chart

🞏 Calculator

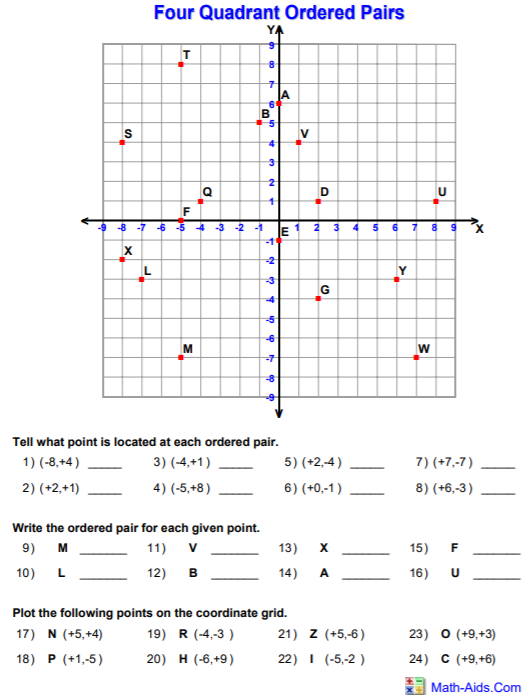
🞏 Translator

🞏 Teacher/ EA Support – circle questions student requires support with

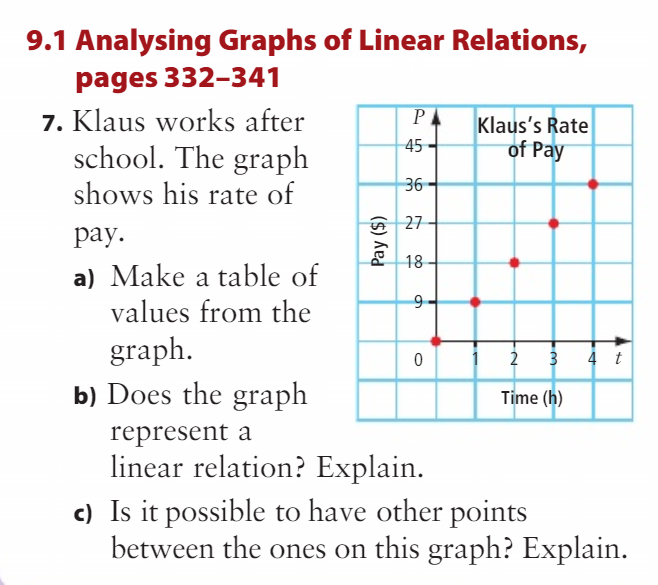
🞏 Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assessment

|  |  |  |  |
| --- | --- | --- | --- |
| **Exemplary** | **Accomplished** | **Developing** | **Beginning** |
| I can **apply** my knowledge of this skill to complete problems.  Ex: word problems | I can **solve** problems when all information is provided.  Ex: 2 step math problems | I can **calculate** when I am provided the steps to complete problems.  Ex: steps are provided for me | I am still working towards the correct steps necessary to complete problems. |

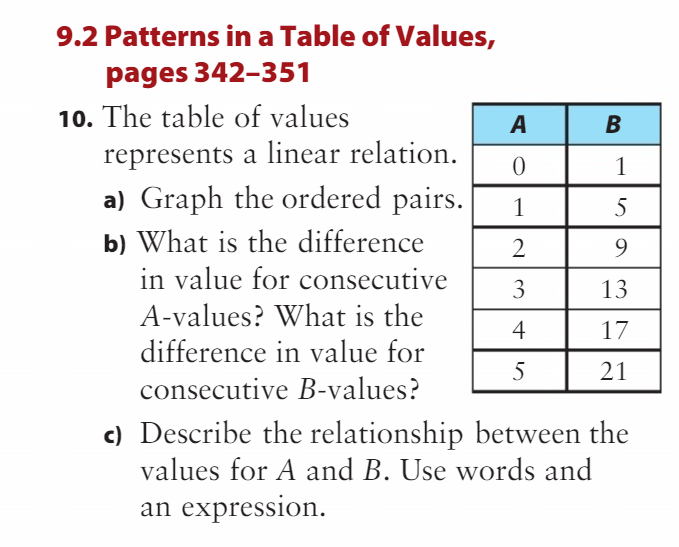


**Analyzing Graphs of Linear Relations**



Speedy print shop charges $2 for the first colour copy and $ 1 for each additional colour copy.

* 1. Make a table of values representing the number of colour copies in relation to the cost. Include zero to five colour copies.
  2. Is this a linear relation? Explain.
  3. What is an expression for the cost in terms of the number of colour copies?
  4. What is the cost of 12 colour copies?





For each equation determine the values for y when x = -7. Use substitution (replacing “x” with “-7” and solving for y.

Y = 7x

Y = 3x -2

Y = -2x + 3