**Notes – College Algebra**

**Section 4.6-Formalizing Relations and Functions**

**Objective(s): To determine whether a relation is a function.**

**To find domain and range and use function notation.**

Warm Up:

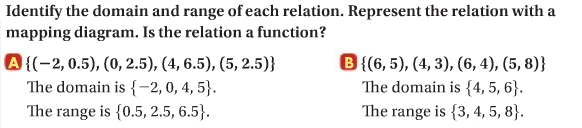
1. The school cafeteria has 285 cartons of juice in stock. Each day, a total of 60 cartons are sold. What equation is a function rule that represents this situation?

2. A plumber charges a service fee o $40 plus $25 per hour for labor. Write a function rule for the total cost of hiring the plumber for a job that takes x hours. How much would it cost to hire the plumber for a job that takes 4 hours?

3. Write a function rule for the area of a triangle whose base is 4ft more than the height. What is the area of the triangle when its height is 6ft?

* Domain =
* Range =
* Relation =

Example 1



* Vertical Line Test =

Example 2



*x*

*y*

*x*

*y*

* Function Notation =

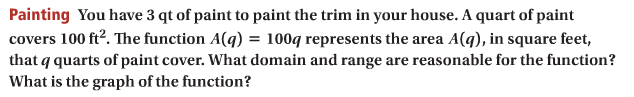
Example 3



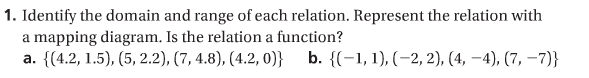
Example 4



Example 5



You try!





*x*

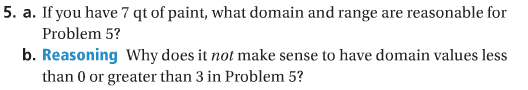
*y*

*x*

*y*







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