

CONCEPT: ISOQUANT LINES

- A firm can produce the same level of output (i.e. 10,000 cookies) with different combinations of inputs

□ **Isoquant Curve** – shows all combinations of two _____ that result in the same level of _____

EXAMPLE: Spooky Cookies bakes cookies using the information in the tables below. Graph the isoquant curves for Spooky's production of cookies based on combinations of labor and capital.

Quantity of



| Production = 500 cookies | | |
|--------------------------|---------------|----------------|
| Bundle | Oven Quantity | Labor Quantity |
| A | 1 | 9 |
| B | 2 | 4 |
| C | 4 | 2 |
| D | 7 | 1 |

| Production = 750 cookies | | |
|--------------------------|---------------|----------------|
| Bundle | Oven Quantity | Labor Quantity |
| E | 2 | 9 |
| F | 3 | 5 |
| G | 5 | 3 |
| H | 8 | 2 |

Marginal Rate of Technical Substitution (MRTS) – rate a firm could substitute between inputs and keep production equal

□ The MRTS is the _____ of the isoquant curve at a point

$$Slope = \frac{\Delta y}{\Delta x} = \frac{Rise}{Run}$$

| Production = 500 cookies | | |
|--------------------------|--------------------------|--------------------------|
| MRTS when using 7 ovens: | MRTS when using 4 ovens: | MRTS when using 2 ovens: |
| | | |