

1.4 Tables of Related Values - Day 2

Common difference relationships:

The top row must count by 1 for the given pairs.

* Look for a common difference in the bottom row.

* Find a start value

→ multiply common difference by the 1st number in top row

→ Subtract that from the 1st number in the bottom row

SENTENCE:

bottom row title is equal to common difference times top row title plus start value.

1.

Hours (h)	1	2	3	4	5	10	12
Cost (C)	\$150	\$200	\$250	\$300	\$350	\$600	\$700

$\begin{array}{r} 50 \\ \times 1 \\ \hline 50 \\ 150 \\ \hline 100 \end{array}$

Common difference = 50
Start value = 100

a. Express the relationship between the quantities in words.

The cost (C) is equal to 50 times the hours (h) plus 100.

b. Write as a formula.

$$C = 50h + 100$$

c. Fill in the missing numbers. (use formula)

$C = 50h + 100$	$C = 50h + 100$	$C = 50h + 100$	$C = 50h + 100$
$C = 50(4) + 100$	$C = 50(5) + 100$	$C = 50(10) + 100$	$C = 50(12) + 100$
$C = 200 + 100$	$C = 250 + 100$	$C = 500 + 100$	$C = 600 + 100$
$C = 300$	$C = 350$	$C = 600$	$C = 700$

2.

people (p)	3	4	5	6	7	12	15
Cost (C)	\$105	\$115	\$125	\$135	\$145	\$195	\$225

$\begin{array}{r} 10 \\ \times 3 \\ \hline 30 \\ 105 \\ \hline 135 \end{array}$

Common difference = 10
Start value = 75

a. Express the relationship between the quantities in words.

The cost (C) is equal to 10 times the people (p) plus 75.

b. Write as a formula.

$$C = 10p + 75$$

c. Fill in the missing numbers.

$C = 10p + 75$	$C = 10p + 75$	$C = 10p + 75$	$C = 10p + 75$
$C = 10(6) + 75$	$C = 10(7) + 75$	$C = 10(12) + 75$	$C = 10(15) + 75$
$C = 60 + 75$	$C = 70 + 75$	$C = 120 + 75$	$C = 150 + 75$
$C = 135$	$C = 145$	$C = 195$	$C = 225$

3.

ounces (z)	3	4	5	8	10	12	20
Cost (C)	\$0.50	\$0.65	\$0.80	\$1.25	\$1.55	\$1.85	\$3.05

$\begin{array}{r} 0.15 \\ \times 3 \\ \hline 0.45 \\ 0.50 \\ \hline 0.65 \end{array}$

Common difference = 0.15
Start value = 0.05

a. Express the relationship between the quantities in words.

The cost (C) is equal to 0.15 times the ounces (z) plus 0.05.

b. Write as a formula.

$$C = 0.15z + 0.05$$

c. Fill in the missing numbers.

$C = 0.15z + 0.05$	$C = 0.15z + 0.05$	$C = 0.15z + 0.05$	$C = 0.15z + 0.05$
$C = 0.15(8) + 0.05$	$C = 0.15(10) + 0.05$	$C = 0.15(12) + 0.05$	$C = 0.15(20) + 0.05$
$C = 1.20 + 0.05$	$C = 1.50 + 0.05$	$C = 1.80 + 0.05$	$C = 3.00 + 0.05$
$C = 1.25$	$C = 1.55$	$C = 1.85$	$C = 3.05$

HOMEWORK

Worksheet HW 1.4 Tables of Values
Day 2