

DO NOW

Can you find a pattern among the numbers?

- 3, 6, 9, 12 ...
add 3 each time
multiples of 3
- 7, 12, 17, 22, 27...
add 5 each time
- 10, 20, 40, 80...
multiply by two (double) each time

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1.4 Tables

Given a table of related values:

To express the relationship between the quantities in words

Study table → look for relationships or patterns

- Row-to-Row relationship
→ add, subtract, multiply or divide by the same number for each pair.
SENTENCE: $\frac{2^{\text{nd}} \text{ row}}{1^{\text{st}} \text{ row}} = \text{Pattern with } 1^{\text{st}} \text{ row}$
- Common difference relationship
(1st row must count by ones for the given pairs)
→ common difference is a per unit value (multiply)
→ start value (add)
SENTENCE: $2^{\text{nd}} \text{ row title equals common difference times } 1^{\text{st}} \text{ row title plus start value.}$

SEE CW 1.4 Tables

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Bonus (b)	\$50	\$120	\$180	\$230	\$260	\$310	\$450	\$500
Total Salary (S)	\$340	\$410	\$470	\$520	\$550	\$600	\$740	\$790

Pattern is bonus plus 290

a. Express the relationship between the quantities in words.

start → Total salary (S) equals bonus (b) plus 290.

b. Write as a formula.

$$S = b + 290$$

c. Fill in the missing numbers.

$b = 260$	$b = 310$	$b = 450$	$b = 500$
$S = b + 290$	$S = b + 290$	$S = b + 290$	$S = b + 290$
$S = 260 + 290$	$S = 310 + 290$	$S = 450 + 290$	$S = 500 + 290$
$S = 550$	$S = 600$	$S = 740$	$S = 790$

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ounces (z)	3	4	5	8	10	12	20	25
Total Cost (C)	\$0.50	\$0.65	\$0.80	\$1.25	\$1.55	\$1.85	\$3.05	\$3.85

a. Express the relationship between the quantities in words.

Total cost (C) equals 0.15 times ounces (z) plus 0.05.

b. Write as a formula.

$$C = 0.15z + 0.05$$

c. Fill in the missing numbers.

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

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texts (t)	15	16	17	20	50	75	100	150
Cost (C)	\$1.00	\$1.03	\$1.06	\$1.15	\$2.05	\$2.80	\$3.55	\$5.05

a. Express the relationship between the quantities in words.

The cost (C) equals 0.03 times the number of texts (t) plus 0.55.

b. Write as a formula.

$$C = 0.03t + 0.55$$

c. Fill in the missing numbers.

$t = 20$	$t = 50$	$t = 75$	$t = 100$
$C = 0.03t + 0.55$	$C = 0.03t + 0.55$	$C = 0.03t + 0.55$	$C = 0.03t + 0.55$
$C = 0.03(20) + 0.55$	$C = 0.03(50) + 0.55$	$C = 0.03(75) + 0.55$	$C = 0.03(100) + 0.55$
$C = 0.60 + 0.55$	$C = 1.50 + 0.55$	$C = 2.25 + 0.55$	$C = 3.00 + 0.55$
$C = 1.05$	$C = 2.05$	$C = 2.80$	$C = 3.55$

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HOMEWORK

Worksheet 1.4 Tables

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