

Outcome 2 - Linear Patterns

Bronze example

Examples... Add 7 each time!

For the table below...

- Write down a rule connecting the number of tables and customers.
- Complete the table.

tables	1	2	3	4	5
customers	7	14	21	28	35

customers = $7 \times$ tables $\times 7$

Silver example

Examples... Add 2 each time!

For the table below...

- Write down a rule connecting the number of tables and people.
- Complete the table.

tables (T)	1	2	3	4	15
people (P)	7	9	11	13	35

$P = 2T + 5$ $\times 2, + 5$

Gold example

Examples... Add 2 each time!

For the table below...

- Write down a rule connecting the number of tables and people.
- Complete the table.

tables (T)	1	2	3	9	33
people (P)	7	9	11	23	71

$P = 2T + 5$ $- 5, \div 2$

Bronze Questions

For the following tables...

- Write down a rule
- Complete the table

1	toasters	1	2	3	4	5
	toast	2	4	6	?	?
2	bowls	1	2	3	4	5
	goldfish	3	6	9	?	?
3	books	1	2	3	4	5
	cost	12	24	36	?	?
4	videos	1	2	3	4	5
	cost	5	10	15	?	?

Silver Questions

For the following tables...

- Write down a rule
- Complete the table

1	cross number (N)	1	2	3	4	18
	squares (S)	5	9	13	?	?
2	shelf size (S)	1	2	3	4	23
	pieces of wood (W)	4	7	10	?	?
3	paving stones (P)	2	3	4	5	37
	edges joined (E)	3	6	9	?	?
4	no. of sections (S)	1	2	3	4	42
	metal rings (R)	4	9	14	?	?

Gold Questions

For the following tables...

- Write down a rule
- Complete the table

1	cross number (N)	1	2	3	?	?
	squares (S)	5	9	13	21	69
2	shelf size (S)	1	2	3	?	?
	pieces of wood (W)	4	7	10	28	76
3	paving stones (P)	2	3	4	?	?
	edges joined (E)	3	6	9	21	96
4	no. of sections (S)	1	2	3	?	?
	metal rings (R)	4	9	14	29	199

Bronze Answers

- | | | |
|----|-----------------------------|--------|
| 1. | toast = $2 \times$ toasters | 8, 10 |
| 2. | goldfish = $3 \times$ bowls | 12, 15 |
| 3. | cost = $12 \times$ books | 48, 60 |
| 4. | cost = $5 \times$ videos | 20, 25 |

Silver Answers

- | | | |
|----|--------------|---------|
| 1. | $S = 4N + 1$ | 17, 73 |
| 2. | $W = 3S + 1$ | 13, 70 |
| 3. | $E = 3P - 3$ | 12, 108 |
| 4. | $R = 5S - 1$ | 19, 209 |

Gold Answers

- | | | |
|----|--------------|-------|
| 1. | $S = 4N + 1$ | 5, 17 |
| 2. | $W = 3S + 1$ | 9, 25 |
| 3. | $E = 3P - 3$ | 8, 33 |
| 4. | $R = 5S - 1$ | 6, 40 |