

PointZero Lost - Codes Information

Zigzag Codes

The letters of the message are written above and below horizontal lines. Two, three or more rows can be used.

Example of a Zigzag 2 code...

W		A		S		Y		E		S		G		?
	H		T		M		M		S		A		E	

WASYESG? HTMMSAE

Example of a Zigzag 3 code...

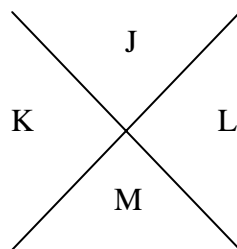
W				S				E				G		
	H		T		M		M		S		A		E	
		A				Y				S				?

WSEG HTMMSAE AYS?

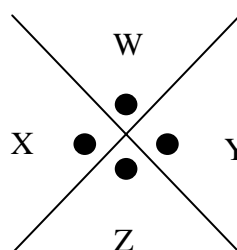
What would the code be for Zigzag 4?

Pigpen Codes

A	B	C
D	E	F
G	H	I



N	O	P
Q	R	S
T	U	V

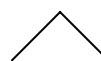


Can you see why:

E is



M is



and T is



?

Rectangle Codes

The letters of the message are written in a rectangular grid.

w	h	a	t
s	m	y	m
e	s	s	a
g	e	?	z

Empty spaces are filled with unlikely letters or symbols, called nulls.

Code: WSEG HMSE AYS? TMAZ

If the message is written across the rectangle, the code uses the columns.

The message can also be written down the columns and the code will use the rows.

The key number tells the receiver in which order the columns should be read.

Key number: 4213

4	2	1	3
W	H	A	T
S	M	Y	M
E	S	S	A
G	E	?	Z

Code: AYS? HMSE TMAZ WSEG

Can you spot the difference between the two rectangle codes?

Polybius Square Codes

This code was invented by the Greek writer Polybius born around 200 BC.

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	IJ	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	V	W	X	Y	Z

Can you see why:

A is 11

M is 32

and Q is 41 ?

Caesar's Alphabet Codes

Julius Caesar used this code to send messages.

It works by shifting the letters a set number of places to the right or left.

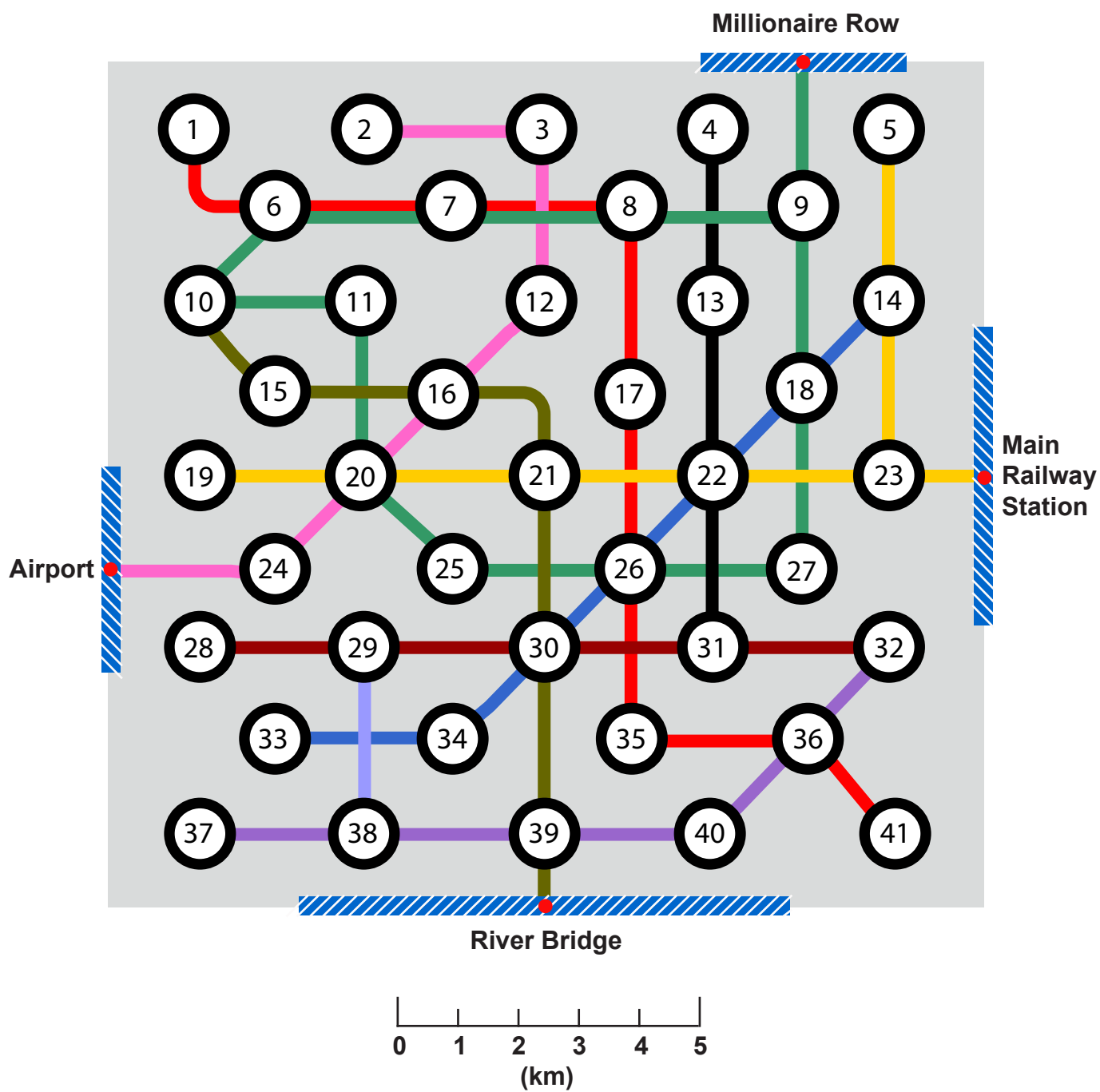
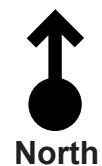
For example, Caesar's D code shifts the alphabet 3 letters to the right.

A	B	C	D	E	F	G	H	I	J	K	L
D	E	F	G	H	I	J	K	L	M	N	O

ZKDW'V PB PHVVDJH

Caesar's G code would shift the alphabet 6 places right.

Caesar's Z code would shift the alphabet 1 place left (or 25 places right).



PointZero Lost – Teacher Answer Sheet

OPTION 1 (PENNY LINE)

Task 1

Code 1: 333 666 88 777
7 666 444 66 8
333 444 888 33
55 6
333 777 666 6
33
33 3 4 33

Answer: 4.5 km from E edge

Code 2: 8 44 33
7777 2 6 33
3 444 7777 8 2 66 222 33
333 777 666 6
333 666 777 8 999
666 66 33
2 7777
333 777 666 6
33 555 33 888 33 66

Answer: The same distance from 41 as from 11

Exit: Station 22

Task 2

Code 1: 66 444 66 33
55 6
333 777 666 6
7777 9
222 666 777 66 33 777

Answer: 9 km from SW corner

Code 2: 66 33 2 777 33 777
6 2 444 66
7777 8 2 8 444 666 66
8 44 2 66
2 444 777 7 666 777 8

Answer: Nearer main station than airport

Exit: Station 35

Task 3

Code 1: 8 44 33
7777 2 6 33
3 444 7777 8 2 66 222 33
333 777 666 6
8 9 33 66 8 999
8 9 666
2 7777
333 777 666 6
8 44 444 777 8 999
33 444 4 44 8

Answer: The same distance from 22 as from 38

Code 2: 7777 33 888 33 66
55 6
333 777 666 6
7777
33 3 4 33

Answer: 7 km from S edge

Exit: Station 20

OPTION 2 (BANK LINE)

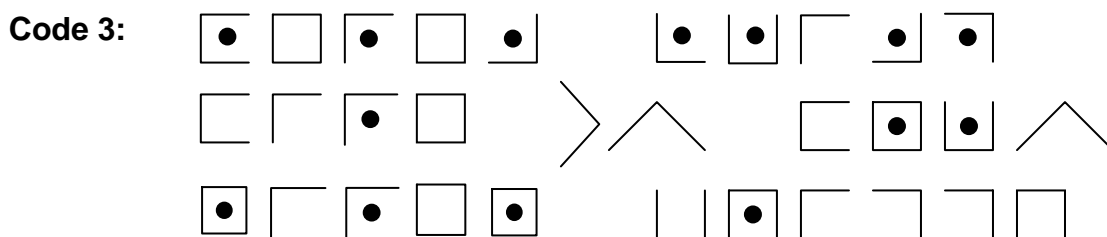
Task 1

Code 1: 8 44 777 33 33 55 6 333 777 666 6 8 44 444 777 8 999 666 66 33

Answer: 3 km from 31

Code 2: 1FWEA 0MRMEGOMP KODF

Answer: 10 km from W edge of map



Answer: 7.5 km from river bridge

Exit: Station 22

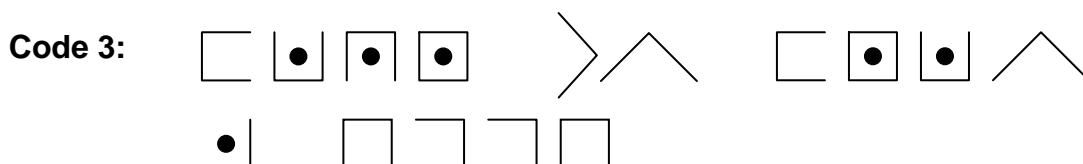
Task 2

Code 1: -1.0 FH AMJH -3 1

Answer: 4.5 km from 26

Code 2: TMTE HFAL RRTE EOIV EMOE KSNM

Answer: 3 km from station 11



Answer: 4 km from N edge

Exit: Station 12

Task 3

Code 1: SOVOSN EPIIERMNT0 VNNFKFMIAI ETMAT

Answer: 7.5 km from main station

Code 2: TENMO HDC1M EIEA3 SSFS1 ATRF MAOR

Answer: The same distance from 1 as from 31


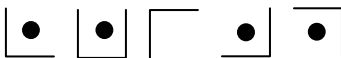
Code 3: XLIWEQIHMWXERGIVSQ9EWJVVSQ6


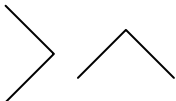
Answer: The same distance from 5 as from 2



Exit: Station 8

OPTION 3 (POUND LINE)

Task 1

Code 1:  

Answer: 8.5 km from 13

Code 2: INSND UAMON ESRT7 IFA15 QTOIA DTTS3

Answer: Equidistant from stations 17 and 35

Code 3: 34.33 11 12.15.11.42.24.33.22 34.21 44.52.34 33.24.33.15
21.24.51.15 14.15.22. 21.42.34.32. 43.15. 13.34.42.33.15.42.
34.21. 32.11.35.

Answer: On a bearing of 295 degrees from SE corner of map

Exit: Station 24

Task 2

Code 1: NDS FHA MJH VDM KJM O

Answer: 6 km from airport

Code 2: ETMNO QANDF UNEWM ITDEA DFGDP IREG SOAE

Answer: Equidistant from N edge and W edge of map

Code 3: TRSD EFOEOEG NMMHUHE KTT

Answer: 10 km from the south edge

Exit: Station 11

Task 3

Code 1: 8 44 777 33 33 55 6 333 777 666 6 7777 8 2 8 555 666 66 8 44
444 777 8 999 333 444 888 33

Answer: 3 km from station 35

Code 2: MMOOA OPLI2 •TING 5HNE2 RDAND KETJ9 FIFIN
5MOIN

Answer: 5.5 km from the midpoint of a line joining 29 and 2

Code 3: NI NEKMF ROMMI LLI ONA IRERO W

Answer 3: 9 km from millionaire row

Exit: Station 26

PointZero Lost - Homework

Choose a station from the tube map.

Write out 2 clues to help your friends identify your station.

Put your clues into code... you can choose 2 different codes.

Write your codes neatly on a sheet of paper to be displayed
in your classroom.

PointZero Lost - Homework

Choose a station from the tube map.

Write out 3 clues to help your friends identify your station.

Put your clues into code... you can choose 3 different codes.

Write your codes neatly on a sheet of paper to be displayed
in your classroom.