



WALL WORK GEOMETRY

TRANSFORMATIONS AND DILATIONS

SpiralEd Solutions

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1



SpiralEd Solutions

reflect over
x-axis

2



SpiralEd Solutions

translate
right one,
up one

3



SpiralEd Solutions

dilate by a
scale
factor of 2

4



SpiralEd Solutions

translate
right one,
down one

5



SpiralEd Solutions

translate
left one,
up one

6



SpiralEd Solutions

translate
left one,
down one

7



SpiralEd Solutions

reflect over
y-axis

8



SpiralEd Solutions

translate
right two,
up three

9



SpiralEd Solutions

dilate by a
scale
factor of
 $\frac{1}{2}$

10



SpiralEd Solutions

translate
right two,
down three

11



SpiralEd Solutions

translate
left two,
up three

12



SpiralEd Solutions

translate
left two,
down three

13



SpiralEd Solutions

rotate 90°
counter-
clockwise

14



SpiralEd Solutions

translate
right three,
up two

15



SpiralEd Solutions

translate
right three,
down two

16



SpiralEd Solutions

dilate by a
scale
factor of
 $\frac{3}{4}$

17



SpiralEd Solutions

translate
left three,
up two

18



SpiralEd Solutions

rotate 90°
clockwise

19



SpiralEd Solutions

translate
left three,
down two

20



SpiralEd Solutions

translate
left four

21



SpiralEd Solutions

22



SpiralEd Solutions

translate
down four

no change

23



SpiralEd Solutions

24



SpiralEd Solutions

translate
up four

rotate 180°

A

SpiralEd Solutions

$$(x, y) \rightarrow (x + 1, y + 1)$$

B

SpiralEd Solutions

$$(x, y) \rightarrow (x - 1, y - 1)$$

C

SpiralEd Solutions

$$(x, y) \rightarrow (x + 2, y - 3)$$

D

SpiralEd Solutions

$$(x, y) \rightarrow (x + 3, y + 2)$$

E

SpiralEd Solutions

F

SpiralEd Solutions

$$(x, y) \rightarrow (y, -x)$$

$$(x, y) \rightarrow (x, y)$$

G

SpiralEd Solutions

H

SpiralEd Solutions

$$(x, y) \rightarrow (-x, -y)$$

$$(x, y) \rightarrow (x - 3, y - 2)$$

I

SpiralEd Solutions

J

SpiralEd Solutions

$$(x, y) \rightarrow (x + 3, y - 2)$$

$$(x, y) \rightarrow (x - 2, y + 3)$$

K

SpiralEd Solutions

L

SpiralEd Solutions

$$(x, y) \rightarrow (-x, y)$$

$$(x, y) \rightarrow (2x, 2y)$$

M

Spiral**Ed** Solutions

N

Spiral**Ed** Solutions

$$(x, y) \rightarrow (x, -y)$$

$$(x, y) \rightarrow (x - 1, y + 1)$$

O

Spiral**Ed** Solutions

P

Spiral**Ed** Solutions

$$(x, y) \rightarrow (x + 2, y + 3)$$

$$(x, y) \rightarrow (x - 2, y - 3)$$

Q

Spiral**Ed** Solutions

$$(x, y) \rightarrow \left(\frac{3}{4}x, \frac{3}{4}y\right)$$

R

Spiral**Ed** Solutions

$$(x, y) \rightarrow (x - 4, y)$$

S

Spiral**Ed** Solutions

$$(x, y) \rightarrow (x, y + 4)$$

T

Spiral**Ed** Solutions

$$(x, y) \rightarrow (x, y - 4)$$

U

SpiralEd Solutions

$$(x, y) \rightarrow (x - 3, y + 2)$$

V

SpiralEd Solutions

$$(x, y) \rightarrow (-y, x)$$

W

SpiralEd Solutions

$$(x, y) \rightarrow \left(\frac{1}{2}x, \frac{1}{2}y\right)$$

X

SpiralEd Solutions

$$(x, y) \rightarrow (x + 1, y - 1)$$

Key Wall Work Geometry
Transformation/Dilation

1	M
2	A
3	L
4	X
5	N
6	B
7	K
8	O
9	W
10	C
11	J
12	P

13	V
14	D
15	I
16	Q
17	U
18	E
19	H
20	R
21	T
22	F
23	S
24	G