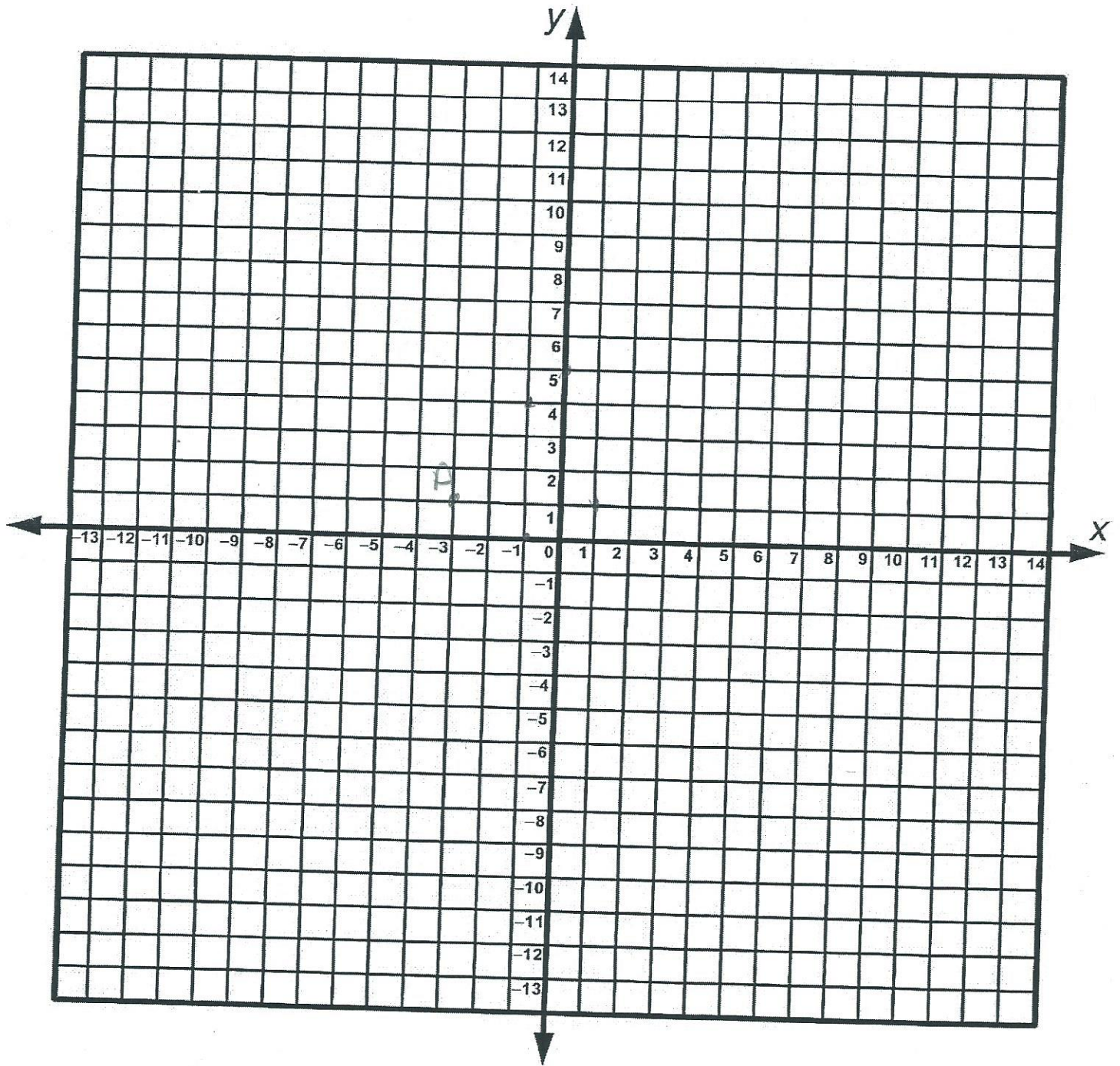



Shifting Shapes Coordinate Grid



Shifting Shapes
Score Sheet

Card	Coordinates	Points
D		
H		
O		
R		
T		
Y		
E		
G		
L		
N		
S		
X		







Shifting Shapes (cards)

A  **A**


Place this figure on the grid with the vertices at these points:
 $A = (2, -8)$ $B = (5, -2)$ $C = (8, -8)$.

A **dilation** of this figure has the coordinates
 $A' = (0, -8)$ $C' = (10, -8)$.

What are the coordinates for B' ?







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B  **B**


Place this figure on the grid with the vertices at these points:
 $A = (-7, 5)$ $B = (-13, 8)$ $C = (-7, 11)$.

A **dilation** of this figure has the coordinates
 $A' = (-6, 4)$ $C' = (-6, 12)$.

What are the coordinates for B' ?







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C  **C**


Place this figure on the grid with the vertices at these points:
 $A = (5, 2)$ $B = (2, -4)$ $C = (-1, 2)$.

A **dilation** of this figure has the coordinates
 $A' = (9, 4)$ $C' = (-5, 4)$.

What are the coordinates for B' ?







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D  **D**


Place this figure on the grid with the vertices at these points:
 $A = (2, -8)$ $B = (5, -2)$ $C = (8, -8)$.

A **translation** of this figure has the coordinates
 $A' = (8, -1)$ $C' = (14, -1)$.

What are the coordinates for B' ?







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E  **E**


Place this figure on the grid with the vertices at these points:
 $A = (-3, 6)$ $B = (0, 12)$ $C = (3, 6)$.

A **reflection** of this figure across the line $y = 5$ has the coordinates
 $A' = (-3, 4)$ $C' = (3, 4)$.

What are the coordinates for B' ?







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F  **F**

Place this figure on the grid with the vertices at these points:
 $A = (-11, 10)$ $B = (-5, 10)$ $C = (-11, 6)$.

A **dilation** of this figure has the coordinates
 $A' = (-10, 9)$ $B' = (-7, 9)$.

What are the coordinates for C' ?

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G**G**

Place this figure on the grid with the vertices at these points:

$$A = (3, 4) \quad B = (3, 10) \quad C = (7, 4).$$

A **reflection** of this figure across the y -axis has the coordinates

$$A' = (-3, 4) \quad C' = (-7, 4).$$

What are the coordinates for B' ?



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H**H**

Place this figure on the grid with the vertices at these points:

$$A = (-4, 2) \quad B = (-4, 8) \quad C = (0, 2).$$

A **translation** of this figure has the coordinates

$$A' = (5, 3) \quad C' = (9, 3).$$

What are the coordinates for B' ?



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J**J**

Place this figure on the grid with the vertices at these points:

$$A = (11, 0) \quad B = (5, 0) \quad C = (11, 4).$$

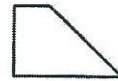
A **dilation** of this figure has the coordinates

$$A' = (11, 0) \quad B' = (-7, 0).$$

What are the coordinates for C' ?



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K**K**

Place this figure on the grid with the vertices at these points:

$$A = (5, -12) \quad B = (5, -8) \\ C = (7, -8) \quad D = (11, -12).$$

A **dilation** of this figure has the coordinates

$$A' = (5, -10) \quad D' = (8, -10).$$

What are the coordinates for B' and C' ?



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L**L**

Place this figure on the grid with the vertices at these points:

$$A = (-3, 2) \quad B = (-7, 2) \\ C = (-7, 4) \quad D = (-3, 8).$$

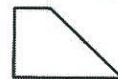
A **reflection** of this figure across the x -axis has the coordinates

$$A' = (-3, -2) \quad B' = (-7, -2).$$

What are the coordinates for C' and D' ?



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M**M**

Place this figure on the grid with the vertices at these points:

$$A = (1, -5) \quad B = (1, -9) \\ C = (-1, -9) \quad D = (-5, -5).$$

A **dilation** of this figure across the x -axis has the coordinates

$$A' = (5, -1) \quad B' = (5, -13).$$

What are the coordinates for C' and D' ?



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N**N**

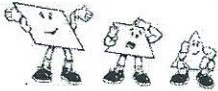
Place this figure on the grid with the vertices at these points:

$$A = (-9, 13) \quad B = (-5, 13)$$

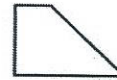
$$C = (-5, 11) \quad D = (-9, 7).$$

A **reflection** of this figure across the line $y = 7$ has the coordinates $B' = (-5, 1) \quad C' = (-5, 3).$

What are the coordinates for A' and D' ?



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O**O**

Place this figure on the grid with the vertices at these points:

$$A = (-8, -7) \quad B = (-8, -3)$$

$$C = (-6, -3) \quad D = (-2, -7).$$

A **translation** of this figure has the coordinates $A' = (3, 1) \quad B' = (3, 5).$

What are the coordinates for C' and D' ?



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P**P**

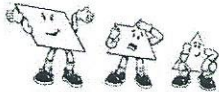
Place this figure on the grid with the vertices at these points:

$$A = (3, -12) \quad B = (5, -9)$$

$$C = (9, -9) \quad D = (11, -12).$$

A **dilation** of this figure has the coordinates $B' = (4, -9) \quad C' = (10, -9).$

What are the coordinates for A' and D' ?



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Q**Q**

Place this figure on the grid with the vertices at these points:

$$A = (7, 4) \quad B = (10, 2)$$

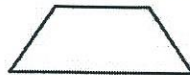
$$C = (10, -2) \quad D = (7, -4).$$

A **dilation** of this figure has the coordinates $B' = (10, 6) \quad C' = (10, -6).$

What are the coordinates for A' and D' ?



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R**R**

Place this figure on the grid with the vertices at these points:

$$A = (12, 13) \quad B = (10, 10)$$

$$C = (6, 10) \quad D = (4, 13).$$

A **translation** of this figure has the coordinates $A' = (7, 2) \quad D' = (-1, 2).$

What are the coordinates for B' and C' ?



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S**S**

Place this figure on the grid with the vertices at these points:

$$A = (-3, 2) \quad B = (-6, 4)$$

$$C = (-6, 8) \quad D = (-3, 10).$$

A **reflection** of this figure across the y -axis has the coordinates $B' = (6, 4) \quad C' = (6, 8).$

What are the coordinates for A' and D' ?



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T**T**

Place this figure on the grid with the vertices at these points:

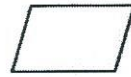
$$A = (-8, -9) \quad B = (-6, -6) \\ C = (-2, -6) \quad D = (0, -9).$$

A **translation** of this figure has the coordinates $A' = (2, -7)$ $D' = (10, -7)$.

What are the coordinates for B' and C' ?



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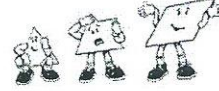
U**U**

Place this figure on the grid with the vertices at these points:

$$A = (-2, -2) \quad B = (0, 2) \\ C = (6, 2) \quad D = (4, -2).$$

A **dilation** of this figure has the coordinates $B' = (0, 0)$ $C' = (3, 0)$.

What are the coordinates for A' and D' ?



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V**V**

Place this figure on the grid with the vertices at these points:

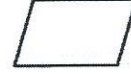
$$A = (-8, 12) \quad B = (-4, 10) \\ C = (-4, 4) \quad D = (-8, 6).$$

The **dilation** of this figure has the coordinates $A' = (-8, 12)$ $D' = (-8, 3)$.

What are the coordinates for B' and C' ?



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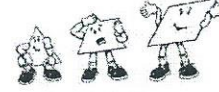
W**W**

Place this figure on the grid with the vertices at these points:

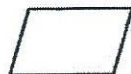
$$A = (7, -3) \quad B = (11, -5) \\ C = (11, -11) \quad D = (7, -9).$$

The **dilation** of this figure has the coordinates $B' = (13, 5)$ $C' = (13, -13)$.

What are the coordinates for A' and D' ?



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X**X**

Place this figure on the grid with the vertices at these points:

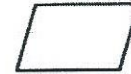
$$A = (-9, 3) \quad B = (-7, 7) \\ C = (-1, 7) \quad D = (-3, 3).$$

A **reflection** of this figure across the y -axis has the coordinates $A' = (9, 3)$ $D' = (3, 3)$.

What are the coordinates for B' and C' ?



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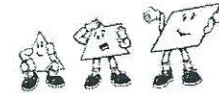
Y**Y**

Place this figure on the grid with the vertices at these points:

$$A = (1, -5) \quad B = (3, -1) \\ C = (9, -1) \quad D = (7, -5).$$

A **translation** of this figure has the coordinates $A' = (2, -7)$ $D' = (8, -7)$.

What are the coordinates for B' and C' ?



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