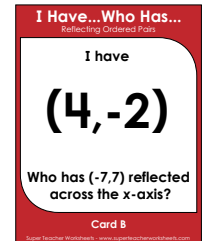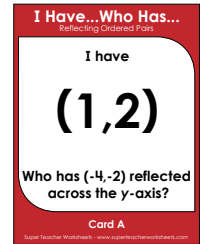# I Have...Who Has...

Reflecting Ordered Pairs

How to play the game:

- Distribute the cards randomly to your students.
  Some students may get more than one card.

- Select a student to begin by reading their card aloud.
  (example: I have (1,2). Who has (-4,-2) reflected across the y-axis?)

- The student who has the card with the correct answer to the previous student's
  "Who Has..." question reads their card aloud.
  (example: I have (4,-2). Who has (-7,7) reflected across the x-axis?

- Students must listen for their turn and try not to break the chain.

- When the chain reaches the student with last card, the game is over.

Suggestions:

- Print out the "I Have, Who Has" flashcards on card stock and
  laminate them so they will last for many years to come.

- Practice the game once with your students so they understand how the game works,
  then see if they can "beat the timer." Set a timer for 2 minutes, 5 minutes, or any amount
  of time you choose. Challenge your students to finish the game before the timer goes off.

Answer Chain:

Who has (8,-6) reflected across the y-axis?

G: I have (-8,-6).
Who has (-5,3) reflected across both axes?

H: I have (5,-3).
Who has (9,-2) reflected across both axes?

I: I have (-9,2).
Who has (5,6) reflected across the x-axis?

J: I have (5,-6).
Who has (9,-5) reflected across the y-axis?

K I have (-9,-5).
Who has (-4,-2) reflected across both axes?

L: I have (4,2).
Who has (3,-4) reflected across both axes?

M: I have (-3,4).
Who has (-6,1) reflected across the x-axis?

N: I have (-6,-1).
Who has (2,-5) reflected across the x-axis?

O: I have (2,5).
Who has (-9,5) reflected across the y-axis?

Who has (9,4) reflected across the x-axis?

V: I have (9,-4).
Who has (5,-3) reflected across the x-axis?

W: I have (5,3).
Who has (-1,-3) reflected across the y-axis?

X: I have (1,-3).
Who has (-5,6) reflected across both axes?

Y: I have (5,-6).
Who has (2,7) reflected across the x-axis?

Z: I have (2,-7).
Who has (-9,2) reflected across the y-axis?

AA: I have (9,2).
Who has (8,1) reflected across both axes?

BB: I have (-8,-1).
Who has (-2,-3) reflected across the x-axis?

CC: I have (-2,3).
Who has (8,9) reflected across the y-axis?

DD: I have (-8,9).
Who has (-1,-2) reflected across both axes?

I have

(1,2)

Who has (-4,-2) reflected across the y-axis?

I have

(4,-2)

Who has (-7,7) reflected across the x-axis?

(-7,-7)

Who has (4,9) reflected across the x-axis?

Card C

(4,-9)

Who has (-6,1) reflected across both axes?

Card D

I have

(6,-1)

Who has (1,8) reflected across the y-axis?

I have

(-1,8)

Who has (8,-6) reflected across the y-axis?

(-8,-6)

Who has (-5,3) reflected across both axes?

(5,-3)

Who has (9,-2) reflected across both axes?

I have

(-9,2)

Who has (5,6) reflected across the x-axis?

I have

(5,-6)

Who has (9,-5) reflected across the y-axis?

(-9,-5)

Who has (-4,-2) reflected across both axes?

Card K

(4,2)

Who has (3,-4) reflected across both axes?

Card L

I have

(-3,4)

Who has (-6,1) reflected across the x-axis?

I have

(-6,-1)

Who has (2,-5) reflected across the x-axis?

(2,5)

Who has (-9,5) reflected across the y-axis?

Card O

(9,5)

Who has (3,-2) reflected across both axes?

Card P

Preview

Please log in to download the printable version of this worksheet.

I Have...Who Has...
Reflecting Ordered Pairs

I have

(-3,2)

Who has (7,-2) reflected across the x-axis?

I Have...Who Has...
Reflecting Ordered Pairs

I have

(7,2)

Who has (3,-4) reflected across the y-axis?
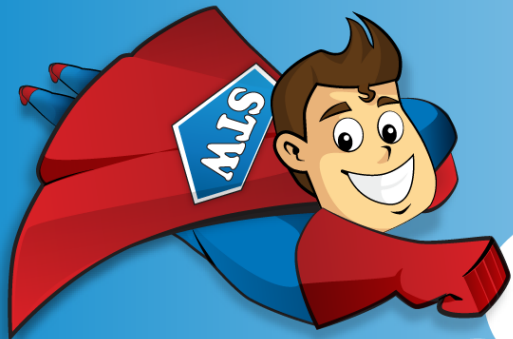
(-3,-4)

Who has (6,-8) reflected across the y-axis?

(-6,-8)

Who has (-7,-7) reflected across both axes?

Card S

Card T

I have

(7,7)

Who has (9,4) reflected across the x-axis?

I have

(9,-4)

Who has (5,-3) reflected across the x-axis?

Preview

Please log in to download the printable version of this worksheet.

(5,3)

Who has (-1,-3) reflected across the y-axis?

Card W

(1,-3)

Who has (-5,6) reflected across both axes?

Card X

I Have...Who Has...
Reflecting Ordered Pairs

I have

(5,-6)

Who has (2,7) reflected across the x-axis?

I Have...Who Has...
Reflecting Ordered Pairs

I have

(2,-7)

Who has (-9,2) reflected across the y-axis?

(9,2)

Who has (8,1) reflected across both axes?

Card AA

(-8,-1)

Who has (-2,-3) reflected across the x-axis?

Card BB

I have

(-2,3)

Who has (8,9) reflected across the y-axis?

I have

(-8,9)

Who has (-1,-2) reflected across both axes?

Fold this page in half to store the cards in when not in use.
Answer Chain:

A: I have (1,2).
Who has (-4,-2) reflected across the y-axis?

B: I have (4,-2).
Who has (-7,7) reflected across the x-axis?

C: I have (-7,-7).
Who has (4,9) reflected across the x-axis?

D: I have (4,-9).
Who has (-6,1) reflected across both axes?

E: I have (6,-1).
Who has (1,8) reflected across the y-axis?

F: I have (-1,8).
Who has (8,-6) reflected across the y-axis?

G: I have (-8,-6).
Who has (-5,3) reflected across both axes?

H: I have (5,-3).
Who has (9,-2) reflected across both axes?

I: I have (-9,2).
Who has (5,6) reflected across the x-axis?

J: I have (5,-6).
Who has (9,-5) reflected across the y-axis?

K I have (-9,-5).
Who has (-4,-2) reflected across both axes?

L: I have (4,2).
Who has (3,-4) reflected across both axes?

M: I have (-3,4).
Who has (-6,1) reflected across the x-axis?

N: I have (-6,-1).
Who has (2,-5) reflected across the x-axis?

O: I have (2,5).
Who has (-9,5) reflected across the y-axis?

P: I have (9,5)
Who has (3,-2) reflected across both axes?

Q: I have (-3,2).
Who has (7,-2) reflected across the x-axis?

R: I have (7,2).
Who has (3,-4) reflected across the y-axis?

S: I have (-3,-4).
Who has (6,-8) reflected across the y-axis?

T: I have (-6,-8).
Who has (-7,-7) reflected across both axes?

U: I have (7,7).
Who has (9,4) reflected across the x-axis?

V: I have (9,-4).
Who has (5,-3) reflected across the x-axis?

W: I have (5,3).
Who has (-1,-3) reflected across the y-axis?

X: I have (1,-3).
Who has (-5,6) reflected across both axes?

Y: I have (5,-6).
Who has (2,7) reflected across the x-axis?

Z: I have (2,-7).
Who has (-9,2) reflected across the y-axis?

AA: I have (9,2).
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CC: I have (-2,3).
Who has (8,9) reflected across the y-axis?

DD: I have (-8,9).
Who has (-1,-2) reflected across both axes?

I Have - Who Has
Reflecting Ordered Pairs