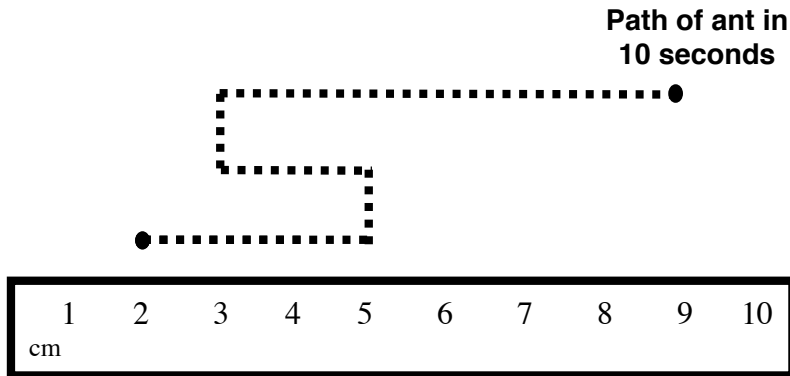


Ant Moves

1

A class is studying ants. Two students decide to measure how far one ant crawls in 10 seconds. The diagram shows the ant's path.



How many centimeters did the ant walk in 10 seconds?

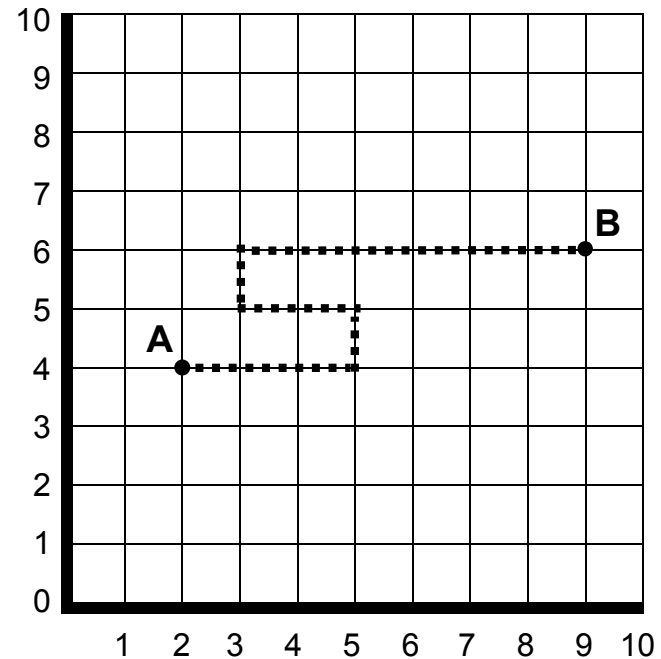
- a) 7 cm
- b) 9 cm
- c) 13 cm
- d) 15 cm

Adapted from Ohio Department of Education

Ant Moves

2

A class is studying ants. The ant walks 1 unit every second from point A to B.



What are the coordinates after the ant walked for 6 seconds?

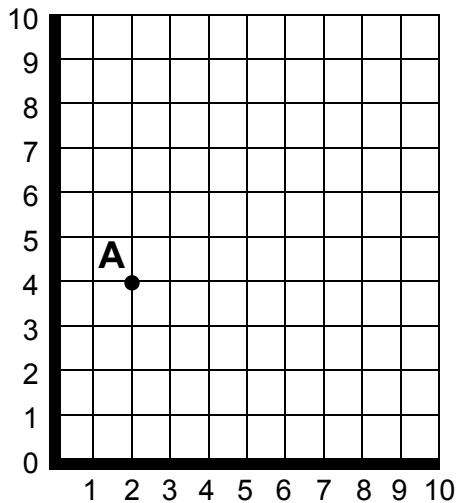
- a) (9,6)
- b) (3,5)
- c) (4,5)
- d) (6,6)

Adapted from Ohio Department of Education

Ant Moves

3

A class is studying ants. Two students decide to measure how far one ant crawls in 10 seconds. The ant walks in straight paths on the grid lines.



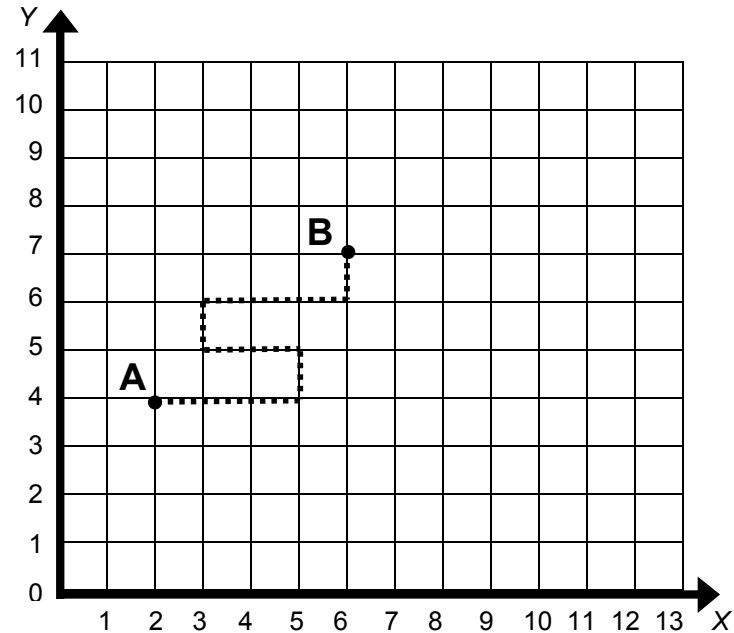
The ant started at Point A (2,4), walks right for 3 units, up 1 unit, left 2 units, up 1 unit, then right 6 units. What are the coordinates of the point the ant reaches after 10 seconds?

- a) (9,4)
- b) (6,9)
- c) (4,9)
- d) (9,6)

Ant Moves

4

An ant walks from A to B in 10 seconds. It then walks from point B for another 10 seconds in the same pattern.

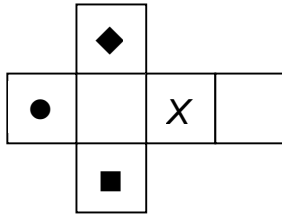


What are the coordinates after the ant walked for 20 seconds?

- a) (6,7)
- b) (10,7)
- c) (10,10)
- d) (12,7)

Cube Shapes

1



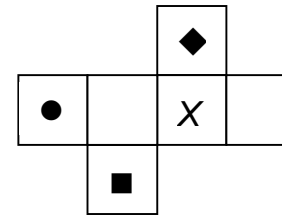
The squares in the figure above represent the faces of a cube that has been cut along some edges and flattened. When the original cube was resting on face *X*, which face was on top?

- a) ●
- b) ◆
- c) ■
- d)

Adapted from NAEP

Cube Shapes

2



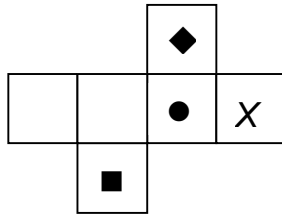
The squares in the figure above represent the faces of a cube that has been cut along some edges and flattened. When the original cube was resting on face *X*, which face was on top?

- a) ●
- b) ◆
- c) ■
- d)

Adapted from NAEP

Cube Shapes

3



The squares in the figure above represent the faces of a cube that has been cut along some edges and flattened. When the original cube was resting on face *X*, which face was on top?

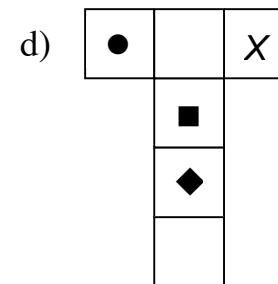
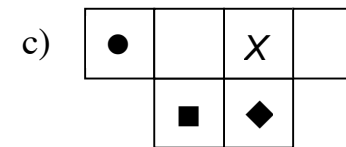
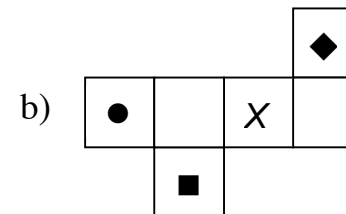
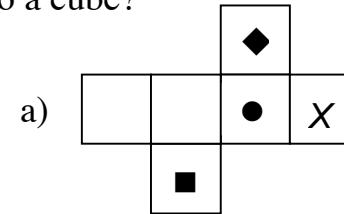
- a) ●
- b) ◆
- c) ■
- d)

Adapted from NAEP

Cube Shapes

4

Which of the following could NOT be folded into a cube?

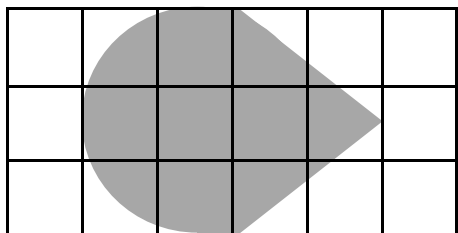


Adapted from NAEP

Shady Shapes

1

Each small square on the grid equals 1 square unit. Estimate the area of the shaded figure.

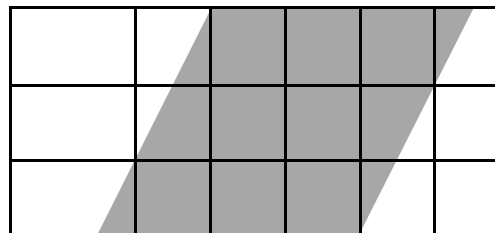


- a) 6 square units
- b) 8 square units
- c) 10 square units
- d) 12 square units

Shady Shapes

2

Each small square on the grid equals 1 square unit. Estimate the area of the shaded figure.

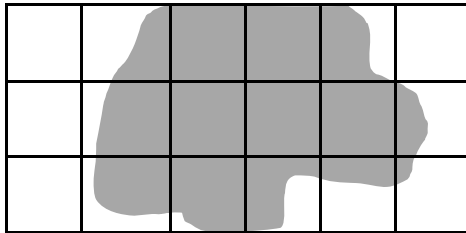


- a) 7 square units
- b) 9 square units
- c) 11 square units
- d) 15 square units

Shady Shapes

3

Each small square on the grid equals 1 square unit. Estimate the area of the shaded figure.

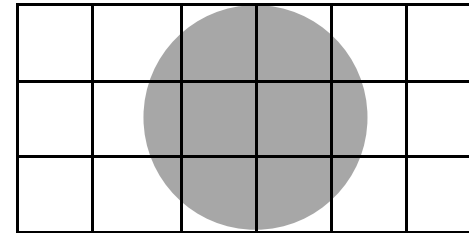


- a) 6 square units
- b) 7 square units
- c) 9 square units
- d) 12 square units

Shady Shapes

4

Each small square on the grid equals 1 square unit. Estimate the area of the shaded figure.

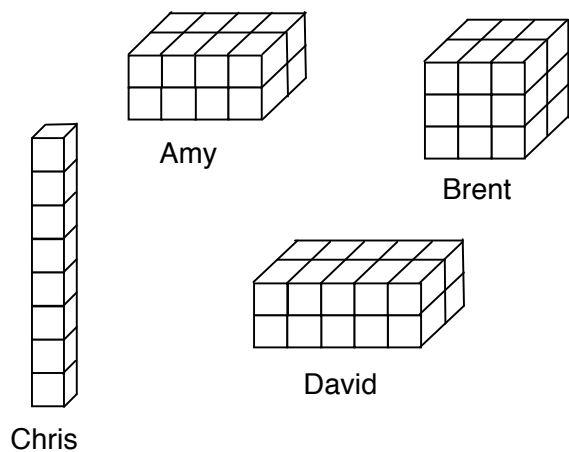


- a) 7 square units
- b) 9 square units
- c) 11 square units
- d) 12 square units

Sugar Cubes

1

Mrs. O'Keefe's kindergarten made buildings with sugar cubes. The volume of each sugar cube is 1 cubic inch. Who made the building with the **greatest** volume?

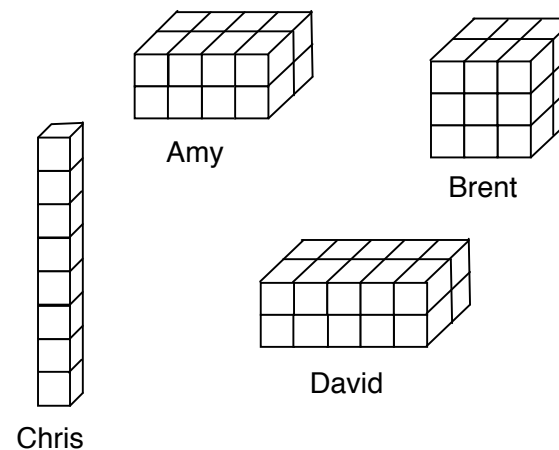


- a) Amy
- b) Brent
- c) Chris
- d) David

Sugar Cubes

2

Mrs. O'Keefe's kindergarten made buildings with sugar cubes. The volume of each sugar cube is 1 cubic inch. What is the volume of Amy's building?

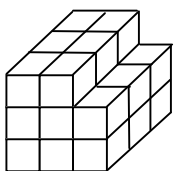


- a) 8 cubic inches
- b) 13 cubic inches
- c) 16 cubic inches
- d) 20 cubic inches

Sugar Cubes

3

Mrs. O'Keefe's kindergarten made buildings with sugar cubes. How many cubes did it take to make this building?




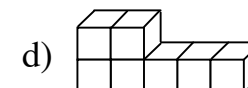
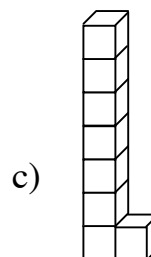
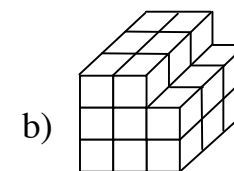
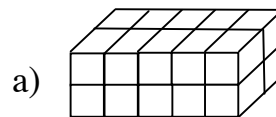
- a) 16 cubes
- b) 18 cubes
- c) 24 cubes
- d) 26 cubes

Sugar Cubes

4

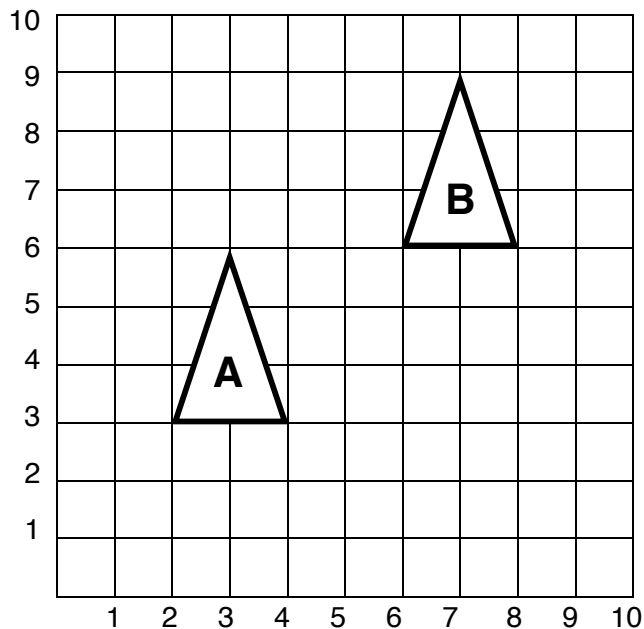
Mrs. O'Keefe's 4th grade class was filling cubes with sugar.

Each cube  holds 3 cups. Which arrangement shows a capacity of 24 cups?



Triangle Twins

1

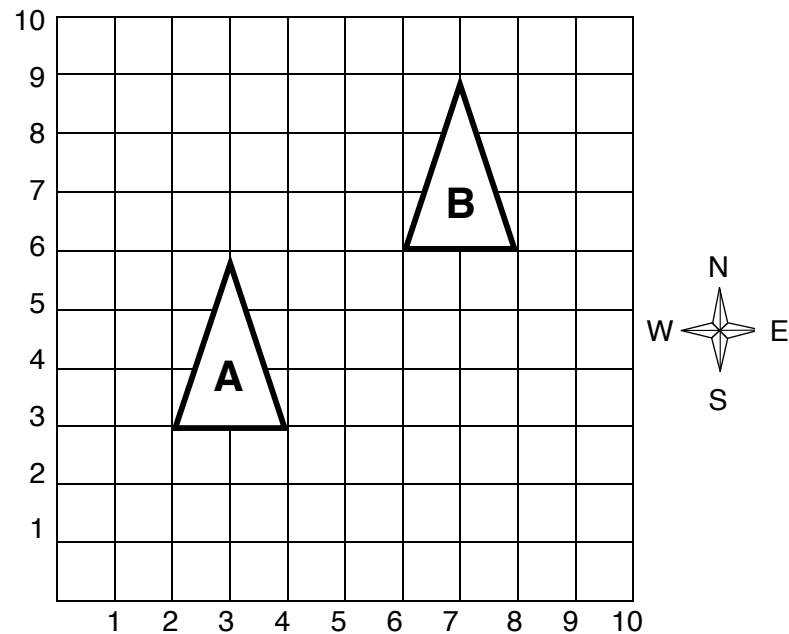


Which of the following most closely describes the translation (slide) of triangle A to triangle B on the grid?

- a) 1 unit to the right and 3 units up
- b) 2 units to the right and 2 units up
- c) 3 units to the right and 3 units up
- d) 4 units to the right and 3 units up

Triangle Twins

2

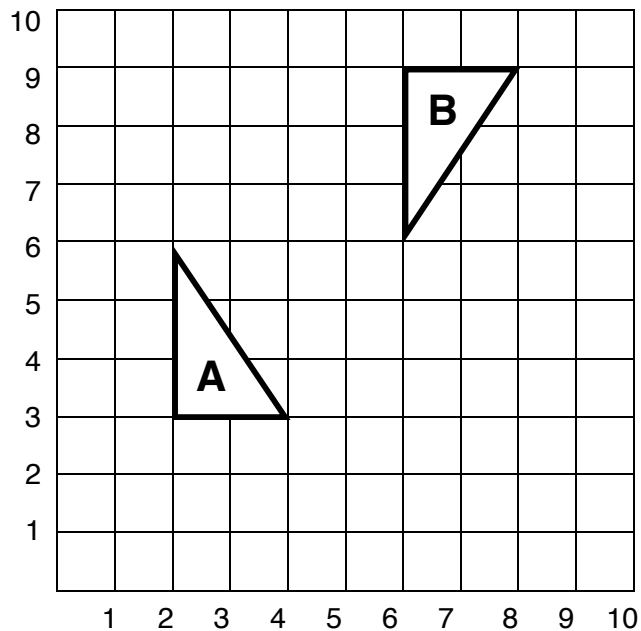


Which of the following most closely describes the translation (slide) of triangle B to triangle A on the grid?

- a) 1 unit to the west and 3 units north
- b) 2 units to the west and 3 units south
- c) 3 units to the east and 3 units north
- d) 4 units to the west and 3 units south

Triangle Twins

3

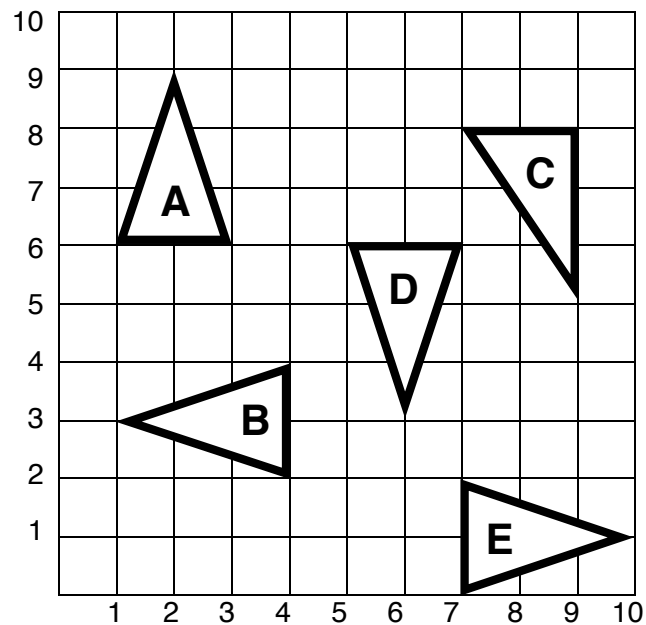


Which pair of transformations (changes) on triangle A would **NOT** result in triangle B's location on the grid?

- a) reflection (flip) and rotation (turn)
- b) reflection (flip) and translation (slide)
- c) translation (slide) and rotation (turn)
- d) translation (slide) and reflection (flip)

Triangle Twins

4



Which of the following triangles is **NOT** congruent to triangle A?

- a) Triangle B
- b) Triangle C
- c) Triangle D
- d) Triangle E