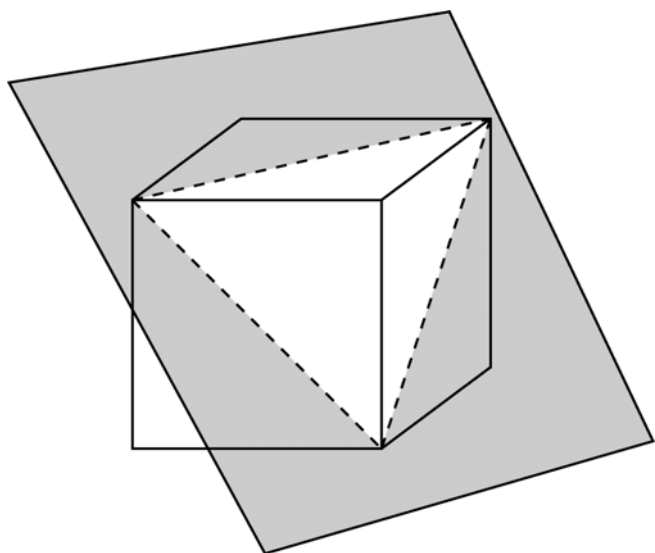


1 Expectation: G.8(D)

For an industrial arts project, Jeremy is going to use a band saw to cut a wooden cube along the plane shown below. The edges of the cube each measure 2 feet.



What is the surface area of the pyramid that Jeremy will cut from the cube?

- A** $6 + 2\sqrt{3} \text{ ft.}^2$
- B** 12 ft.^2
- C** $6 + 4\sqrt{3} \text{ ft.}^2$
- D** 14 ft.^2

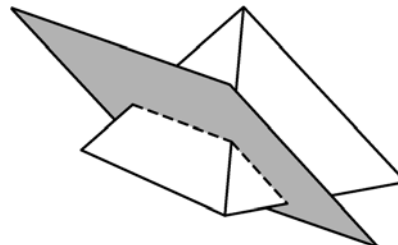
2 Expectation: G.7(B)

Which of the following is an equation of the line that passes through the point $(-2, 5)$ and is perpendicular to the line with equation $y = \frac{1}{2}x + 5$?

- F** $y = -2x - 9$
- G** $y = 2x + 1$
- H** $y = -2x + 1$
- J** $y = 2x + 9$

3 Expectation: G.6(A)

A square pyramid is cut along the shaded plane shown below.

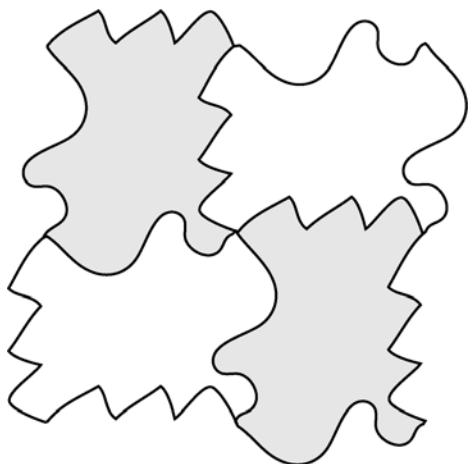


Which of the following is the cross-section of this solid?

- | | | | |
|----------|--|----------|--|
| A | | C | |
| B | | D | |

4 Expectation: G.5(C)

Sara created the tiles for the tessellation below by cutting pieces from one side of a square and affixing the pieces back to a different side.

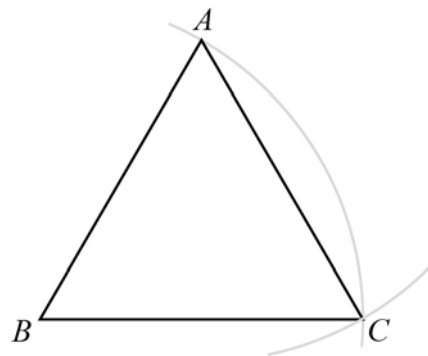


Which transformation will transform one of the white shapes shown to one of the gray shapes shown?

- F** 90° counterclockwise rotation, then reflection across y -axis
- G** Reflection across y -axis, then 90° counterclockwise rotation
- H** 90° clockwise rotation, then reflection across x -axis
- J** Reflection across x -axis, then 90° counterclockwise rotation

5 Expectation: G.2(B)

Robin used a compass to draw two arcs through the vertices of $\triangle ABC$.

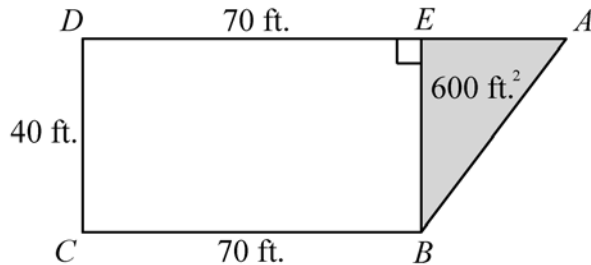


Robin concluded from his drawing that $\triangle ABC$ is equilateral. What must be true for Robin's conclusion to be justified by his drawing?

- A** Robin centered his compass at the midpoint of \overline{AC} to draw the short arc.
- B** Robin used a ruler to measure the compass setting for both arcs.
- C** Robin set the compass at AB for one arc and at AC for the other.
- D** Robin used the same compass setting to draw both arcs.

6 Expectation: G.8(A)

The plan of a parcel of land is represented by trapezoid $ABCD$ in the accompanying diagram.



If the area of $\triangle ABE$ is 600 square feet, what is the minimum number of feet of fence needed to completely enclose the entire parcel of land, $ABCD$?

		2	6	0				
(+)	(-)	(●)	(●)	(●)	(●)	(●)	(●)	(●)
		(1)	(1)	(1)	(1)	(1)	(1)	(1)
		(●)	(2)	(2)	(2)	(2)	(2)	(2)
		(3)	(3)	(3)	(3)	(3)	(3)	(3)
		(4)	(4)	(4)	(4)	(4)	(4)	(4)
		(5)	(5)	(5)	(5)	(5)	(5)	(5)
		(6)	(●)	(6)	(6)	(6)	(6)	(6)
		(7)	(7)	(7)	(7)	(7)	(7)	(7)
		(8)	(8)	(8)	(8)	(8)	(8)	(8)
		(9)	(9)	(9)	(9)	(9)	(9)	(9)

7 Expectation: G.11(D)

A garden is in the shape of a square. The length of one side of the garden is increased by 3 feet, and the length of an adjacent side is increased by 2 feet. The garden now has an area of 72 square feet. What is the measure, in feet, of a side of the original square garden?

[illegible]

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Item Number	Reporting Category	Readiness or Supporting	Content Student Expectation	Correct Answer
1	4	Readiness	G.8(D)	A
2	3	Readiness	G.7(B)	H
3	3	Supporting	G.6(A)	B
4	2	Supporting	G.5(C)	G
5	1	Readiness	G.2(B)	D
6	4	Readiness	G.8(A)	260
7	5	Readiness	G.11(D)	6