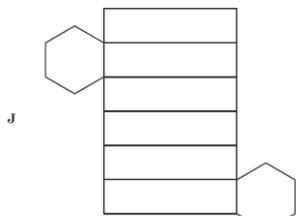
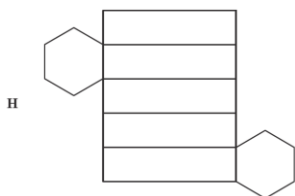
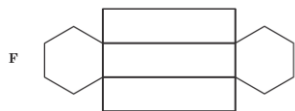
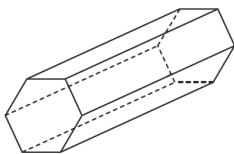
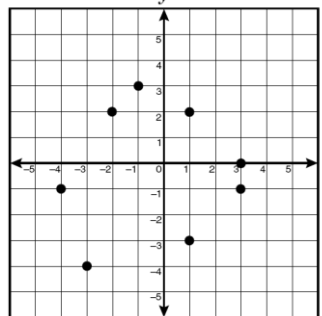


Which net best represents the hexagonal prism shown below?



July '06 Obj 7 - # 4

Which ordered pairs form the vertices of an isosceles trapezoid?



- A (1, 2), (3, -1), (-3, -4), and (-4, -1)
- B (1, 2), (3, -1), (-4, -1), and (-2, 2)
- C (-1, 3), (3, -1), (-2, 2), and (-4, -1)
- D (-1, 3), (-4, -1), (-2, 2), and (3, 0)

July '06 Obj 7 - # 43

What is the approximate distance between points $(-7, 2)$ and $(11, -5)$?

- A 18.36 units
- B 19.31 units
- C 18.25 units
- D 8.06 units

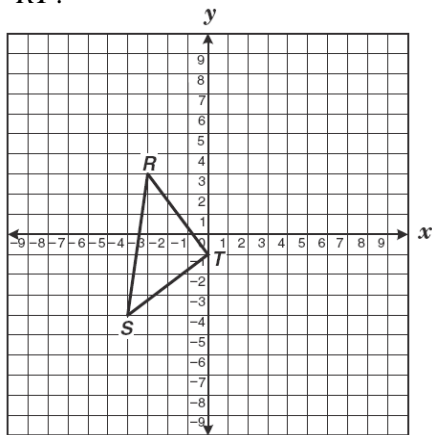
July '06 Obj 7 - # 11

Which of the following 3-dimensional figures is made from a set of points in space that are equidistant from a fixed point?

- A Cylinder
- B Sphere
- C Cube
- D Tetrahedron

July '06 Obj 7 - # 47

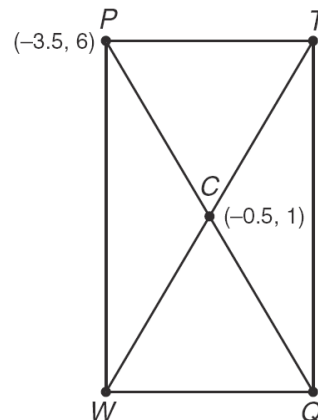
$\triangle RST$ is a right triangle. If the equation of the line containing ST is $y = \frac{3}{4}x - 1$, which of the following best represents the equation of the line containing \overline{RT} ?



- F $y = \frac{4}{3}x - 1$
- G $y = -\frac{4}{3}x - 1$
- H $y = -\frac{3}{4}x - 1$
- J $y = \frac{3}{4}x - 1$

July '06 Obj 7 - # 40

The midpoint of the diagonals of rectangle $PTQW$ is $(-0.5, 1)$. The coordinates of P are $(-3.5, 6)$. What are the coordinates of Q ?



- A $(-2, 3.5)$
- B $(-6.5, 11)$
- C $(-1.5, 2.5)$
- D $(2.5, -4)$

July '06 Obj 7 - # 57

Objective 7 - Page 2 of 6

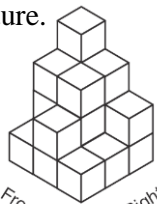
The drawing shows the top view of a structure built with cubes as well as the number of cubes in each column of the structure.

4	3	2
2	3	1
1	2	1

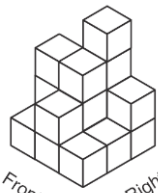
Right

Front

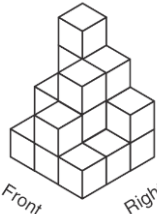
F



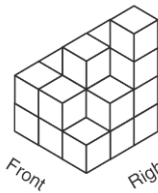
H



G



J



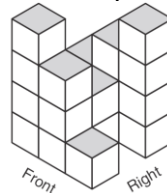
July '06 Obj 7 - # 60

The diagram below shows the top view of a structure built with identical cubes, as well as the number of cubes in each column of the structure. Which 3-dimensional view best represents the same structure?

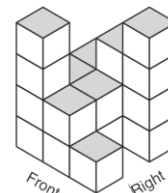
2	3	4
2	2	
4	2	1

Front

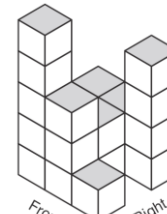
F



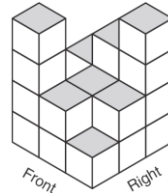
H



J



G



April '06 Obj 7 - # 14

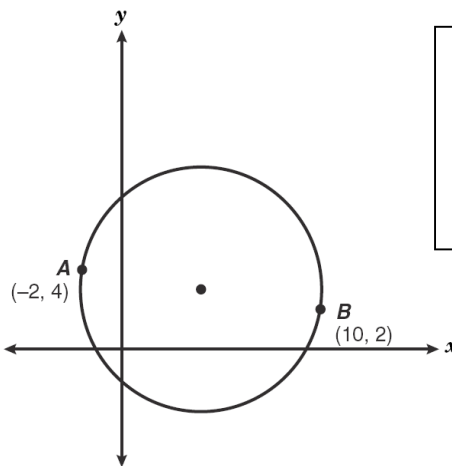
Which of the following relationships could not be used to determine the length of \overline{DR} , as shown below?



- A $DF + FQ + QR = DR$
- B $DQ + QR = DR$
- C $DQ + FR = DR$
- D $DF + FR = DR$

April '06 Obj 7 - # 9

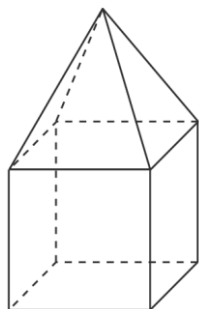
\overline{AB} is a diameter of the circle shown below. Which is closest to the length of the radius of the circle?



- A 3.1 units
- B 4.3 units
- C 6.1 units
- D 12.2 units

April '06 Obj 7 - # 25

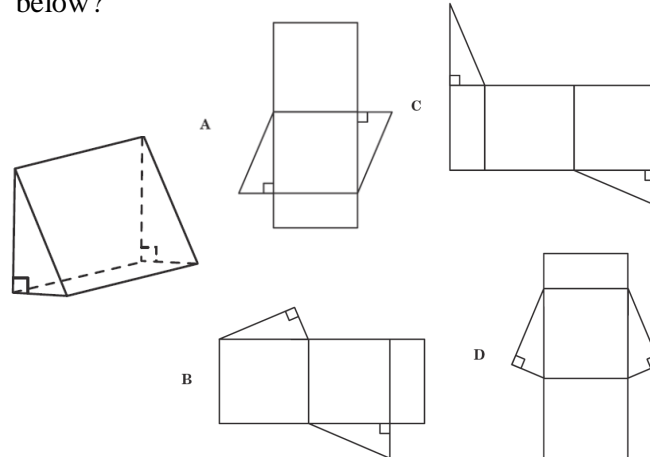
How many faces, edges, and vertices does the solid shown below have?



- F 4 faces, 10 edges, and 7 vertices
- G 9 faces, 10 edges, and 8 vertices
- H 10 faces, 16 edges, and 9 vertices
- J 9 faces, 16 edges, and 9 vertices

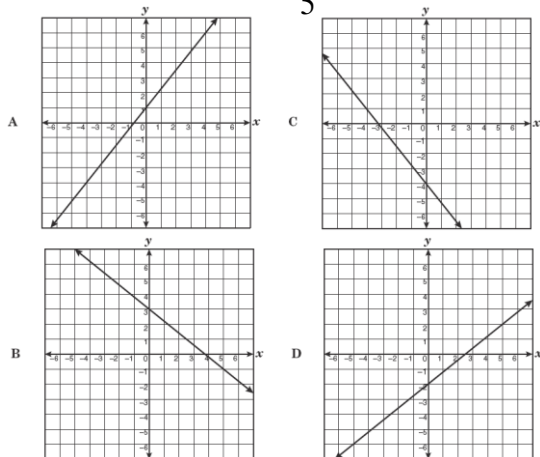
April '06 Obj 7 - # 10

Which net best represents the triangular prism shown below?



April '06 Obj 7 - # 31

Which graph best represents a line that is parallel to the graph of the equation $y = -\frac{4}{5}x - 2$?



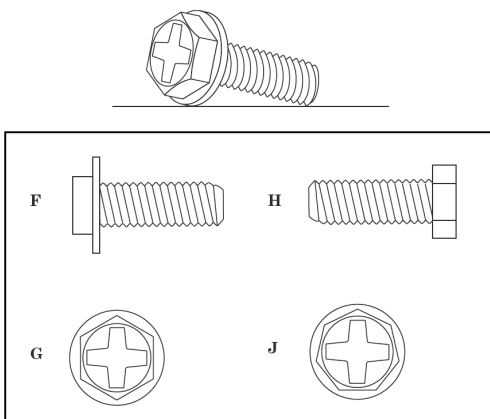
April '06 Obj 7 - # 45

The midpoint of \overline{AB} is M . If the coordinates of M are $(\frac{1}{2}, -2)$ and the coordinates of B are $(6, 1)$, what are the coordinates of A ?

- A $(-5, -5)$
- B $(2, -10)$
- C $(-3\frac{1}{4}, -1\frac{1}{2})$
- D $(-5, 5)$

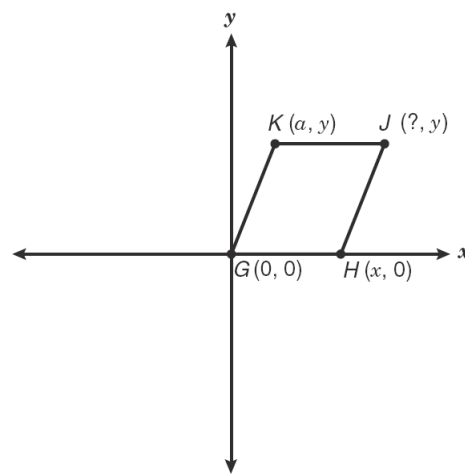
Feb '06 Obj 7 - # 17

The illustration below shows a 3-dimensional view of a screw. Which of the following best represents a front, a side, or a top view of this screw?



April '06 Obj 7 - # 60

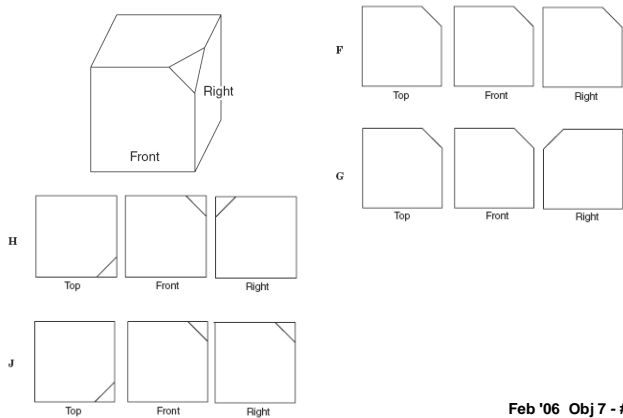
Parallelogram $GHJK$ is shown below. Which of the following represents the x -value of point J ?



- F $y - x$
- G $x + y$
- H $a + x$
- J $x - a$

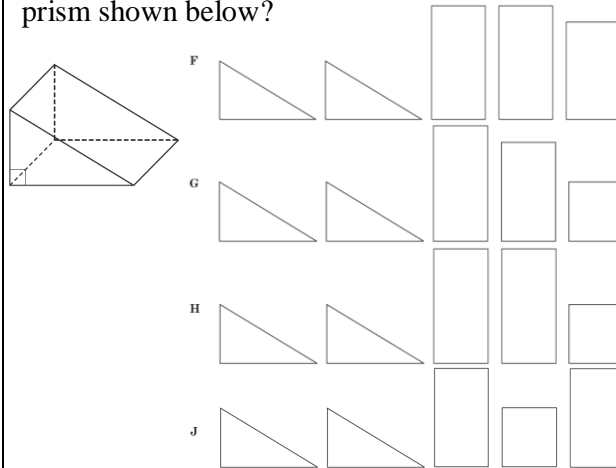
Feb '06 Obj 7 - # 20

The figure shown below is a cube with a corner sliced off. Which of the following sets of 2-dimensional drawings shows the top, front, and right views of the figure above?



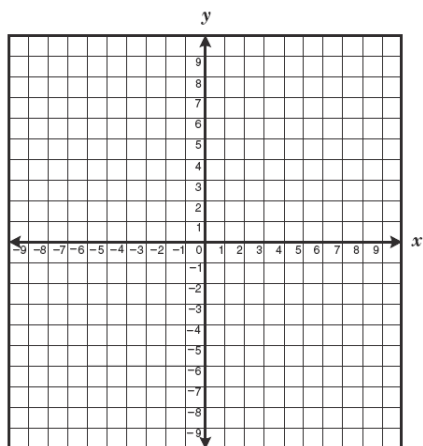
Feb '06 Obj 7 - # 8

Which set of figures can be used to construct a representation of the surface area of the triangular prism shown below?



Feb '06 Obj 7 - # 24

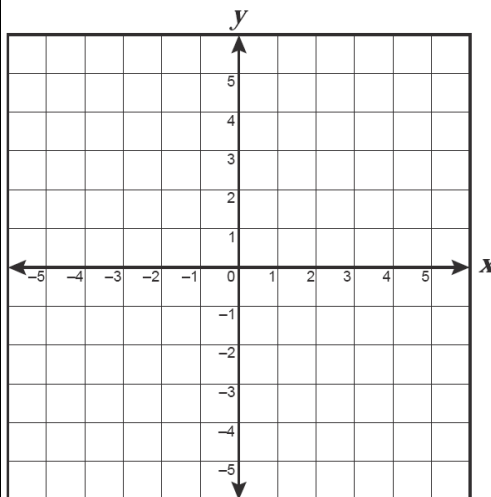
A right triangle has two vertices with coordinates (0, 3) and (4, 1). Which coordinate could be a third vertex of this right triangle?



- A (2, 2)
- B (4, 4)
- C (6, 5)
- D (8, -1)

Feb '06 Obj 7 - # 35

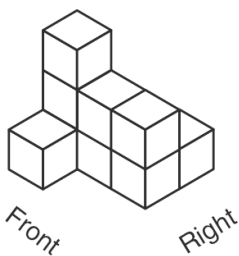
If a line contains the points (1, -1) and (3, 3), which of the following points also lies on this line?



- A (4, 2)
- B (2, 4)
- C (2, 1)
- D (1, 2)

Dec '06 Obj 7 - # 1

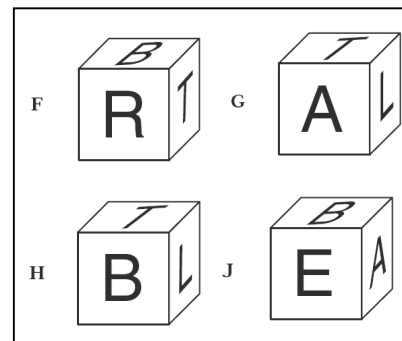
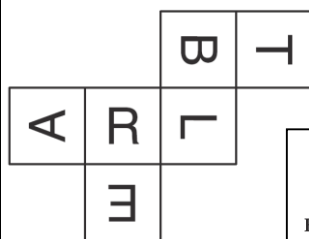
The 3-dimensional figure shown below represents a structure that Corina built with 9 cubes. Which of the following best represents the top view of Corina's 9-cube structure?



- A
- B
- C
- D

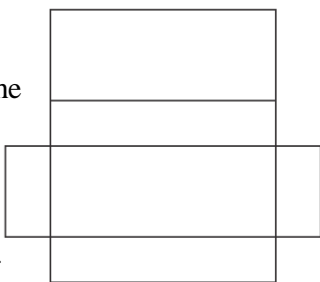
Feb '06 Obj 7 - # 49

The net below can be folded to form a cube. Which cube could be formed from this net?



Dec '06 Obj 7 - # 6

Use the ruler on the Mathematics Chart to measure the dimensions of the net of the rectangular prism shown below to the nearest tenth of a centimeter. Which of the following best represents the dimensions of the rectangular prism?



- F 7.5 cm by 1.5 cm by 3.0 cm
- G 10.5 cm by 1.5 cm by 9.0 cm
- H 10.5 cm by 3.0 cm by 9.0 cm
- J 7.5 cm by 3.0 cm by 3.0 cm

Feb '06 Obj 7 - # 60

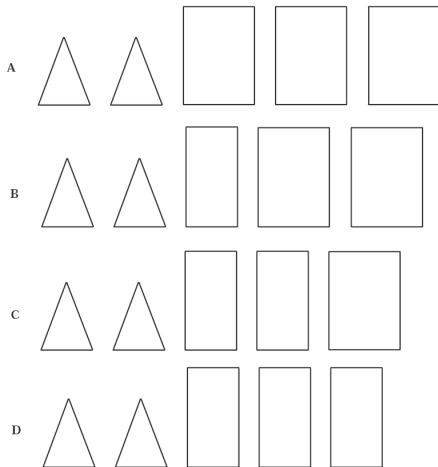
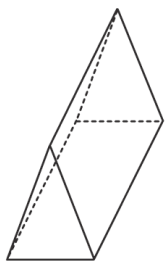
Which of the following describes a solid with 1 base and no vertices?

- F Cone
- G Sphere
- H Cylinder
- J Hemisphere

Dec '06 Obj 7 - # 30

Objective 7 - Page 5 of 6

Which set of figures can be used to construct a representation of the surface area of the solid shown below?



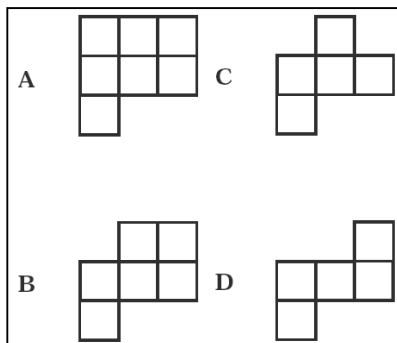
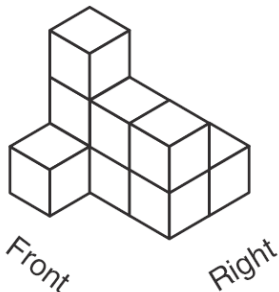
Dec '06 Obj 7 - # 47

Find the midpoint of the line segment with endpoints (4, -6.25) and (-15, 12.25).

- A** (-5.5, 3)
B (-9.5, 9.25)
C (-11, 6)
D (-19, 18.5)

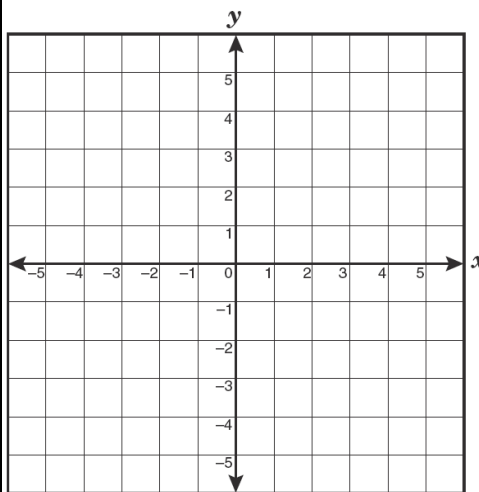
Dec '06 Obj 7 - # 59

The 3-dimensional figure shown below represents a structure that Corina built with 9 cubes. Which of the following best represents the top view of Corina's 9-cube structure?



Dec '06 Obj 7 - # 49

If a line contains the points (1, -1) and (3, 3), which of the following points also lies on this line?



- F** (4, 2)
G (2, 4)
H (2, 1)
J (1, 2)

Oct '06 Obj 7 - # 2

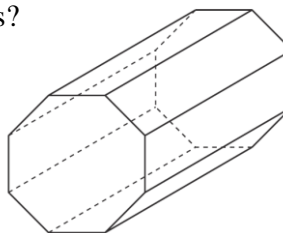
Which two lines are parallel?

- F** $6x - 2y = -8$ and $3x + y = -4$
G $3x - y = -1$ and $9x - 3y = -6$
H $12x - 4y = -4$ and $x - 3y = -9$
J $9x - 3y = -6$ and $5x + 15y = 15$

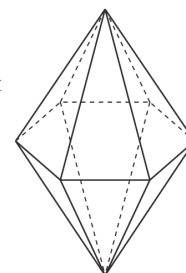
Dec '06 Obj 7 - # 52

Which of these 3-dimensional figures has the following characteristics: 12 faces, 8 vertices, and 18 edges?

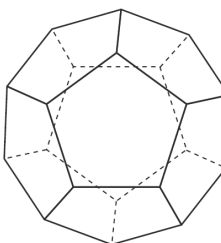
F



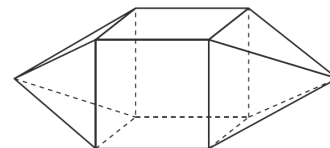
H



G



J



Oct '06 Obj 7 - # 10

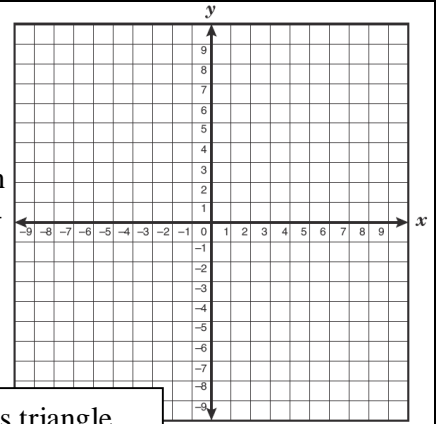
Objective 7 - Page 6 of 6

Find the midpoint of the line segment with endpoints (4, -6.25) and (-15, 12.25).

- F** (-5.5, 3)
- G** (-9.5, 9.25)
- H** (-11, 6)
- J** (-19, 18.5)

Oct '06 Obj 7 - # 16

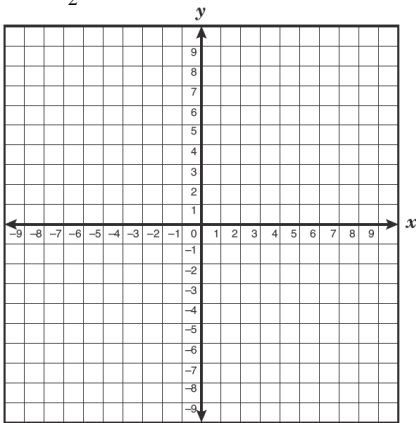
The coordinates of the vertices of a triangle are (-3, -4), (9, 0), and (1, 8). The best description of this triangle is —



- F** a right isosceles triangle
- G** a right scalene triangle
- H** an isosceles triangle
- J** an equilateral triangle

Oct '06 Obj 7 - # 46

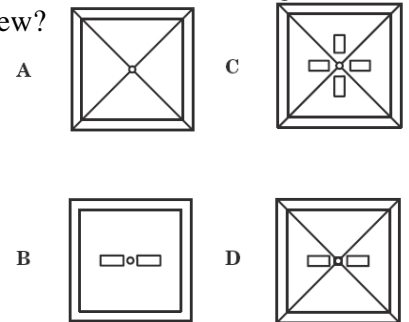
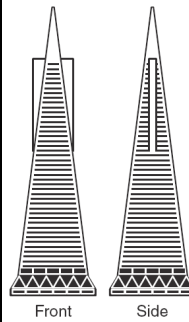
Line l_1 has an x -intercept at (3, 0) and a y -intercept at (0, 6). The x -intercept for line l_2 is (4, 0). If lines l_1 and l_2 are perpendicular, what is the y -intercept of line l_2 ?



- A** (0, -8)
- B** (0, -2)
- C** (0, 2)
- D** (0, 8)

Oct '06 Obj 7 - # 39

The Transamerica Pyramid is a building located in San Francisco, California, that resembles a square pyramid. The diagram below shows a front and side view of the building. If the back view of the building is similar to the front view and the side views are similar to each other, which of the following best represents the top view?



Oct '06 Obj 7 - # 57