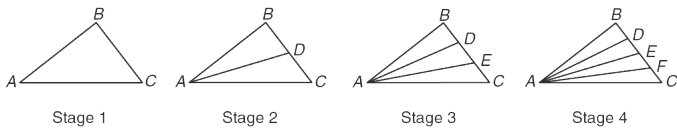


Objective 6 - Page 2 of 6

Look at the figures and the table below. How many triangles will the n th stage contain?

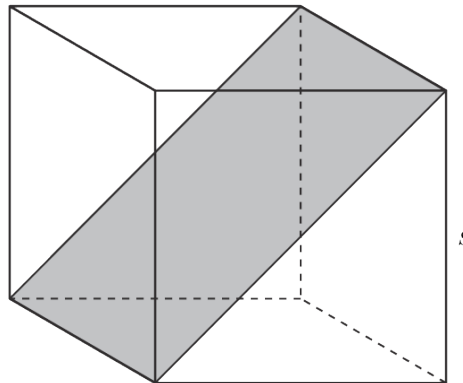


Stage	Number of Triangles
1	1
2	3
3	6
4	10

- F $2^n - 1$
- G $\frac{n^2 + n}{2}$
- H $2n - 1$
- J $\frac{n^2 + 2}{2}$

July '06 Obj 6 - # 54

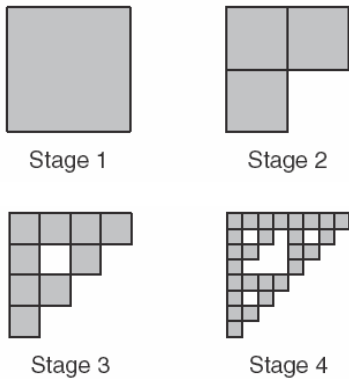
Look at the cube shown below. Which equation best represents the area of the shaded rectangle located diagonally in the cube?



- A $A = s^2\sqrt{3}$
- B $A = \frac{s^3}{2}$
- C $A = s^3\sqrt{2}$
- D $A = s^2\sqrt{2}$

April '06 Obj 6 - # 19

The first 4 stages of a certain fractal are shown below. In each stage after the first, each square is divided into 4 squares, and then the bottom right square is removed. If the pattern continues, how many shaded square units will Stage 5 contain?

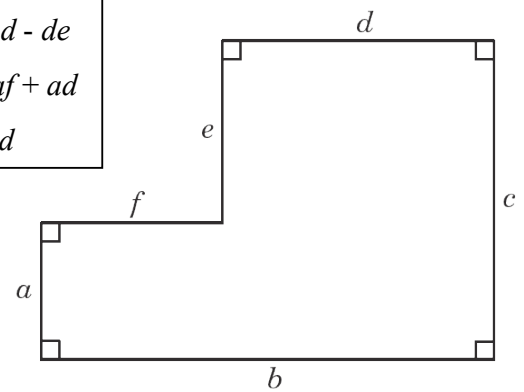


- F 243
- G 54
- H 81
- J 27

April '06 Obj 6 - # 8

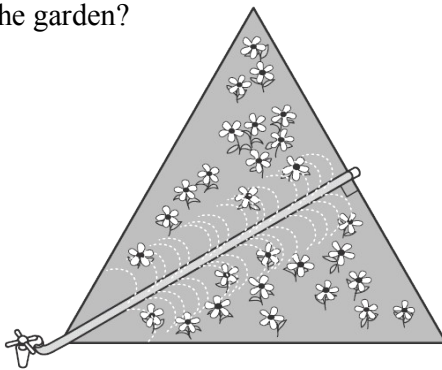
Look at the figure shown below. Which expression does not represent the area of the figure?

- A $bc - ef$
- B $af + ad - de$
- C $de + af + ad$
- D $af + cd$



April '06 Obj 6 - # 33

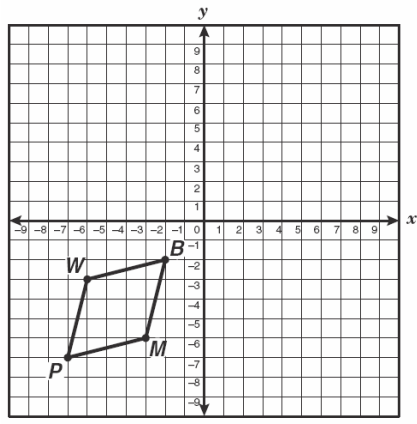
Mr. Schultz has a garden shaped like an equilateral triangle that measures 11 feet on each side. He has placed a watering hose that extends from the faucet located at a vertex to the opposite side, as shown below. Which is closest to the length of the hose in the garden?



- A 7.8 ft
- B 9.5 ft
- C 6.4 ft
- D 5.5 ft

April '06 Obj 6 - # 15

Parallelogram $WBMP$ is shown on the grid below. If $WBMP$ is reflected across the line $y = -x$ and then translated 4 units down to become parallelogram $W'B'M'P'$, what will be the coordinates of M' ?



- F (-6, -7)
- G (6, -1)
- H (6, 7)
- J (6, 3)

April '06 Obj 6 - # 36