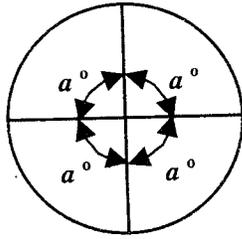


Practice Set 3

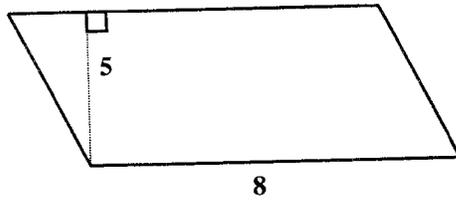
1.



In the figure above, $a =$

	/	/	
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

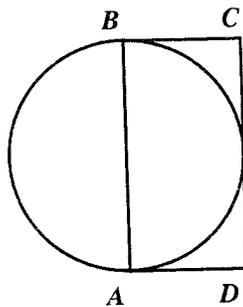
2.



The area of the parallelogram in the figure above is

	/	/	
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

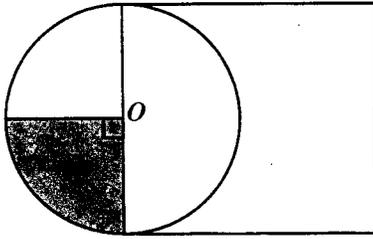
3.



In the figure above, if the radius of the circle (with diameter AB) is 6, what is the perimeter of rectangle $ABCD$?

	/	/	
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

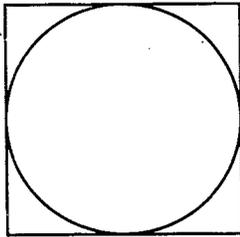
4.



The figure above is made up of a circle with center O and a square. If the shaded portion of the circle with central angle 90 degrees is 9π , what is the area of the square?

.	/	/	.
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

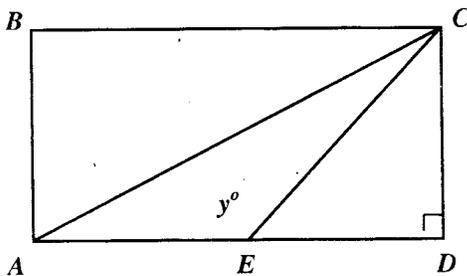
5.



If the area of the inscribed circle in the figure above is 25π then the area of the square is

.	/	/	.
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

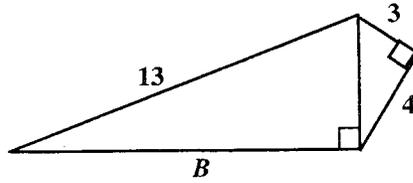
6.



If $CD = DE$ in the figure above, then the value of y in degrees is

.	/	/	.
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

7.



Note: Figure not drawn to scale.

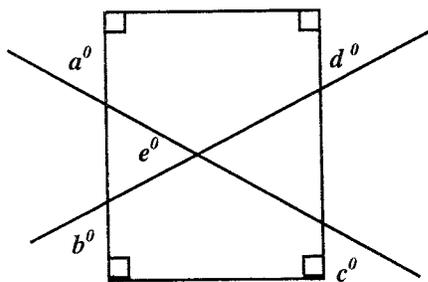
The length of side B in the figure above is

.	7	7	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

8. A builder wants to put a continuous sidewalk around his square plot of land. If the land is 200 ft on a side, and the sidewalk is purchased in 10 ft square plates, what is the area of the sidewalk after it is laid around the plot of land?

.	7	7	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

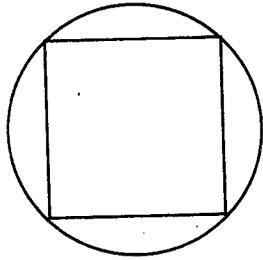
9.



The rectangle in the figure above is cut by two lines. What is the value of $a + b + c + d + 2e$, in degrees?

.	7	7	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

10.



If the area of the circle in the figure above is 32π , then the area of the inscribed square is

	/	/	
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9