1. $(3 \times 104)+\left(2 \times 10^{2}\right)+(4 \times 10)=$

C A. 302400
0
B. 32400

0
C. 30240

0
D. 3240

0
E. 324
2. Andy solves problems 74 to 125 inclusive in a Math exercise. How many problems does he solve?

O A. 53
0
B. 52

0
C. 51

0
D. 50

0
E. 49
3. If $x$ and $y$ are integers, and $3 x+2 y=13$, which of the following could be the value of $y$ ?

Select ALL values that apply.
$\square$
B. 1
$\square$
C. 2
$\Gamma$
D. 3

4. In triangle $A B C, A D=D B$, $D E$ is parallel to $B C$, and the area of triangle $A B C$ is 40 . What is the area of triangle ADE ?
A. 10

0
B. 15

0
C. 20

0
D. 30
E. it cannot be determined from the information given
5. If $\mathrm{n}>0$, which of the following must be true?

Select ALL that apply.

```
    A. }\mp@subsup{\textrm{n}}{}{2}>
    B. n- n < < 0
    C. 2n-1>0
    D. 2n >}>
\begin{tabular}{ll}
\(A\) & \(B\) \\
\hline 2 & 5 \\
3 & 10 \\
4 & 17 \\
5 & 26
\end{tabular}
```

6. Which of the following describes the relationship between $A$ and $B$ as shown in the pairs of numbers in the table above?
C $A \cdot B=A+4$
0
B. $B=2 A+1$
C. $B=3 A-1$
D. $B=A^{2}+1$
C. $B=A^{2}-1$
7. 6 people meet for a business lunch. Each person shakes hands once with each other person present. How many handshakes take place?
A. 30

P
B. 21
C. 18

O
D. 15

0
E. 10
8. If $x^{2}-y^{2}=55$, and $x-y=11$, then $y=$
A. 8

0
B. 5

0
C. 3
D. -8
C. -3
9. In a sports club with 30 members, 17 play badminton and 19 play tennis and 2 do not play either. How many members play both badminton and tennis?
A. 7

0
B. 8

0
C. 9
D. 10

0
E. 11

10. Rectangle ABCD has a perimeter of 26 . The half circle with diameter AD has an area of $8 \pi$. What is the perimeter of the part of the figure that is not shaded?
C A. $26+4 \pi$
0
B. $18+8 \pi$

O
C. $18+4 \pi$
$\bigcirc$
D. $14+4 \pi$

0
E. $14+2 \pi$

## Answer Key

1. $(3 \times 104)+\left(2 \times 10^{2}\right)+(4 \times 10)=$
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Select ALL that apply.
$\Gamma$
A. $\mathrm{n}^{2}>1$

Г
B. $\mathrm{n}-\mathrm{n}^{2}<0$
C. $2 n-1>0$
$\ulcorner$
D. $2 n^{3}>0$

| $A$ | $B$ |
| :--- | :--- |
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C. $18+4 \pi$

0
D. $14+4 \pi$

0
E. $14+2 \pi$

## Answer Key

1. C
2. $B$
3. C
4. A
5. D
6. D
7. D
8. E
9. $B$
10. C
