

Question 1

$$\left(\frac{1}{2}\right)^{778}(-2)^{777} =$$

- A. -2
- B. -0.5
- C. 0
- D. 0.5



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Question 2

$$9x^2 - y^2 - 6x^2y - 5xy^2 - y^3 =$$

- A. $(3x + y)(3x - y - 2xy - y^2)$
- B. $(3x + y)(3x - y - 2xy + y^2)$
- C. $(3x - y)(3x + y - 2xy - y^2)$
- D. $(3x - y)(3x + y - 2xy + y^2)$



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Question 3

If the point $A(0,0)$, $B(0,4)$ and $C(c,2)$ are the vertices of an equilateral triangles, then $c =$

若 $A(0,0)$, $B(0,4)$ and $C(c,2)$ 為一等邊三角形的頂點，則 $c =$

- A. 1
- B. $\sqrt{12}$
- C. 1 or -1
- D. $\sqrt{12}$ or $-\sqrt{12}$


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Question 4

The rectangular coordinates of the point P are $(-4, -4\sqrt{3})$. If P is rotated anti-clockwise about the origin through 90° to P' , then the area of $\triangle POP' =$

P 的直角座標為 $(-4, -4\sqrt{3})$ ， P 點繞原點沿逆時針轉 90° 至 P' ，則 $\triangle POP' =$

- A. 16 sq. units .
- B. 32 sq. units.
- C. 64 sq. units.
- D. 128 sq. units.


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Question 5

If $(m-2)(n+3) = n$ and $m \neq 3$, then $n =$

若 $(m-2)(n+3) = n$ ，且 $m \neq 3$ ，則 $n =$

- A. $\frac{2}{m-3}$
- B. $\frac{3(m-2)}{3-m}$
- C. $\frac{m-2}{3-m}$
- D. $\frac{3(m-2)}{2}$


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Question 6

If N is greater than M by 25% and N is 30% less than P , then $M =$

若 N 比 M 大 25%， N 比 P 少 30%，則 $M =$

- A. $0.44P$.
- B. $0.55P$.
- C. $0.56P$.
- D. $0.875P$.



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Question 7

If $(p+5)(p-5)+\Delta \equiv p^2+25$, then $\Delta =$

若 $(p+5)(p-5)+\Delta \equiv p^2+25$ ，則 $\Delta =$

- A. -25
- B. -5
- C. 0
- D. 50



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Question 8

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- A. $27 \times 2^{10} + 22$
- B. $27 \times 2^{10} + 44$
- C. $27 \times 2^{11} + 22$
- D. $27 \times 2^{11} + 44$



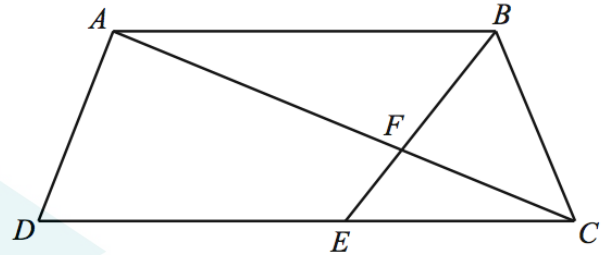
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Question 9

In the figure, $ABCD$ is a trapezium where $AB \parallel DC$. E is a point on DC such that $AB : CE : DE = 5 : 3 : 4$. If BE and AC intersect at F such that the area of $\triangle BFC$ is 60 cm^2 , find the area of the quadrilateral $ADEF$.

在圖中， $ABCD$ 為梯形且 $AB \parallel DC$ 。 E 為 DC 上的點使得 $AB : CE : DE = 5 : 3 : 4$ 。 F 為 BE 及 AC 的交點使得 $\triangle BFC$ 面積為 60 cm^2 ，求 $ADEF$ 的面積

- A. 88 cm^2
- B. 124 cm^2
- C. 188 cm^2
- D. 224 cm^2



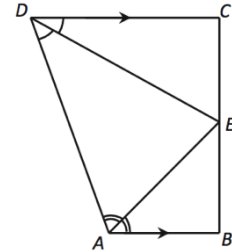
Question 10

In the figure, $ABCD$ is a trapezium with $AB \parallel DC$. AE bisects $\angle DAB$ and DE bisects $\angle ADC$. Which of the following must be correct?

在圖中， $ABCD$ 為梯形且 $AB \parallel DC$ 。 AE 平分 $\angle DAB$ 及 DE 平分 $\angle ADC$ 。 以下哪項必為正確？

- I. $BE = EC$
- II. $\angle AED = 90^\circ$
- III. $\triangle ABE \sim \triangle ECD$

- A. I only 只有 I
- B. II only 只有 II
- C. I and III only 只有 I 及 III
- D. II and III only 只有 II 及 III



Answer Key

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



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