# Digital SAT March 2024

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**1) 33 sided polygon, sum of angles is $180P$. What is the value of $P$?**

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**2) $g(x) = \frac{f(x)}{x+2}$, $f(x)$ is linear. What is the $Y - I$ of $f(x)$?**

| $x$ | $g(x)$ |
|---|---|
| **1** | **5** |
| **2** | **15** |

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**3) Circle is inscribed in square, circle equation is $x^2 + 4x + y^2 - 8y - 80 = 0$; what is the area of the square?**

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**4) The equation $\sqrt{x - k} = 86 - x$, has only one solution.**
**What is the minimum value of $4k$?**

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**5) Simplify: $\frac{y+8}{x-8} + \frac{x-8}{x^2y-8xy}$**

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**6) How many solutions for the following system of 3 linear equations?**
$-2x + y = 3, \quad 4x - 2y = 10, \quad -6x + 3y = 15$

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**7)** $\Delta ABC$ **similar to** $\Delta XYZ$, $m\angle B$ **and** $m\angle Y$ **are** $90°$. **If** $m\angle A° = 31°$, **what is the value of** $m\angle Z°$**?**

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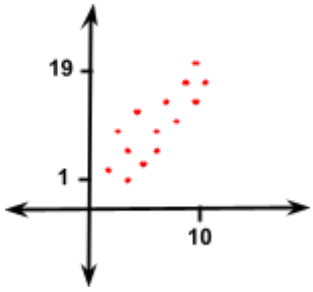
**8)**




A) $y = 1.8x + 0.7$
B) $y = -1.8x - 0.7$
C) $y = 1.8x - 0.7$
D) $y = 18x - 7$

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**9)** $f(x) = 4 + \sqrt{x}$, **what is** $f(36)$**?**

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**10)** $f(x) = \frac{7}{10}x + 52$, **find** $f(20)$**?**

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**11) Line R is parallel to line S with equation** $3x - 2y = 10$.
**What is the slope of line R.**

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**12) Find the center of circle with equation,** $(x - 2)^2 + (y - 3)^2 = 25$

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