

ERRATA SHEET

Digital SAT® MATH PRACTICE QUESTIONS

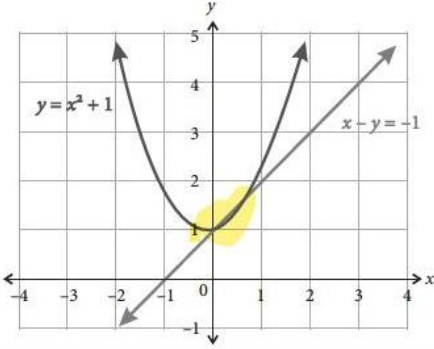
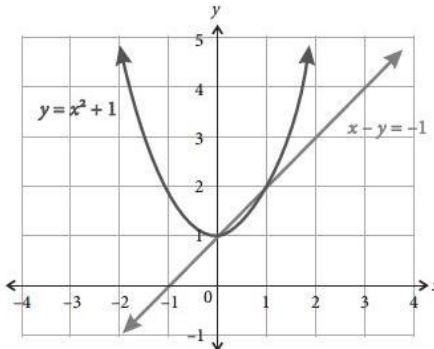
Second Edition

The errata for Digital SAT® Math Practice Questions are shown in this pdf. This book had multiple print runs; this errata is applicable to print runs before Apr 24, 2024. The consecutive print runs have corrected these errors. In case you do not find the below errors in your book, it is because they have been corrected.

Page No.		
ix	Error in the book	First, read the About the Digital SAT chapter to get acquainted with the various features of the digital test. From this chapter, you will learn in detail the differences between the paper-based SAT and the digital one. Then read about the structure of Math section in the next chapter, which is equally divided into four main domains: Algebra, Advanced Math, Problem-Solving and Data Analysis, and Geometry and Trigonometry.
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3	Error in the book	Discrete Questions One interesting aspect of the Digital SAT is that all their questions are in discreet format; that is they are standalone. You can answer each question on its own, which doesn't necessarily require any reference to a common stimulus such as an extended passage. This is one of the striking differences between the paper-and-pencil SAT and the Digital SAT in the sense that the former uses both discrete and question sets . In practice, the question sets expect you to reference a common stimulus.
	Corrected	Discrete Questions One interesting aspect of the Digital SAT is that all their questions are in discrete format; that is they are standalone. You can answer each question on its own, which doesn't necessarily require any reference to a common stimulus such as an extended passage. This is one of the striking differences between the paper-and-pencil SAT and the Digital SAT in the sense that the former uses both discrete and combined question sets. In practice, the question sets expect you to reference a common stimulus.
4	Error in the book	Test Length There are a total of 54 questions for the Reading and Writing section. These 54 questions are divided into two equal-length modules; that is, one for each of the section's two stages. Out of the 27 questions for each module, 25 questions are operational —which means that test takers' performance on them is used to calculate their section score, and 2 questions are pretests . For the Math section, the first module has 20 operational questions and 2 pretest questions. Then the second module consists of 20 operational questions and 2 pretest questions. In total, the Math section will comprise 44 questions.

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9	Error in the book	<p>second paragraph of the passage talks about how many scientists have offered dates, but a conclusive date has yet to be finalized. The keywords to focus on are "formal, conclusive date" which points to which option (A) might be most suitable in this context.</p>
	Corrected	<p>paragraph of the passage talks about how many scientists have offered dates, but a conclusive date has yet to be finalized. The keywords to focus on are "formal, conclusive date" which points to option (A) as the most suitable option in this context.</p>
11	Error in the book	<p>Key Explanation: Choice A is correct. To determine the inequality that represents the situation, first create the expression that is equal to the total amount that Mindy paid (C).</p> <p>The total amount C is the sum of the membership fee (\$10) and the fee for having the dog in the park in h hours. This yields $C = 10 + 3h$ or $C = 3h + 10$.</p> <p>Since Mindy spent less than \$40 in the dog park, then $C < 40$. Substituting the value of C in terms of h in the inequality yields $3h + 10 < 40$.</p> <p>Therefore, the inequality $3h + 10 < 40$ is the correct answer.</p>
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16	Error in the book	<p>Tips for the Math Section</p> <p>You would find these tips helpful when preparing for your Digital SAT Math test:</p> <ul style="list-style-type: none"> Always read the SAT Math questions understandably before you start answering them. You don't want to waste your limited time providing answers to questions you vaguely understand.
	Corrected	<p>Tips for the Math Section</p> <p>You would find these tips helpful when preparing for your Digital SAT Math test:</p> <ul style="list-style-type: none"> Always read the SAT Math questions carefully before you start answering them. You don't want to waste your limited time providing answers to questions you vaguely understand.

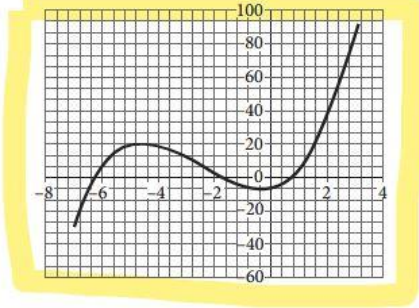
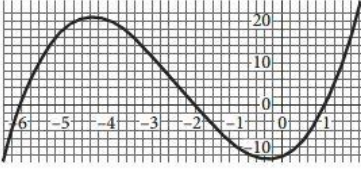
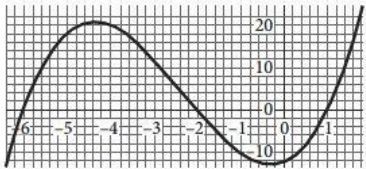
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18	Error in the book	<p>Linear equations in two variables</p> <hr/> <p>For example, $10x + 4y = 30$ is an example of a linear equation with two variables x and y.</p> <p>Hence, if $y = 3$,</p> $x = 30 - \frac{12}{10}$ <p>$x = 1.8$</p>
	Corrected	<p>Linear equations in two variables</p> <hr/> <p>For example, $10x + 4y = 30$ is an example of a linear equation with two variables x and y.</p> <p>If $y = 3$, $10x = 30 - 4(3)$</p> $10x = 18$ <p>$x = 1.8$</p>
20	Error in the book	<p>Distractor Explanations: Choice A is incorrect. This option would result in system of perpendicular linear equations and would have one solution. Choice B is incorrect. This option would result to a system of equation with one solution as the linear equations would have different slopes. Choice D is incorrect. This option would result to a system of equation with one solution as the linear equations would have different slopes.</p>
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21	Error in the book	<p>Linear inequalities in one or two variables</p> <hr/> <p>This is an example of a linear inequality equation with one variable, $x: ax + b < c$ where a, b, and c are real numbers.</p> <p>Hence, if $a = 1$, $b = 4$, and $c = 10$, $x < 10 - \frac{4}{1}$</p> <p>$x < 6$</p> <p>However, for a linear inequality equation in two variables, $ax + by < c$, where a, b, and c are real numbers, and b is not equal to 0.</p> <p>Hence, if $a = 2$, $b = 3$, and $c = 20$, $y = 1$, x will be $x = 20 - \frac{3}{2}$</p> <p>$x = 18.5$</p>

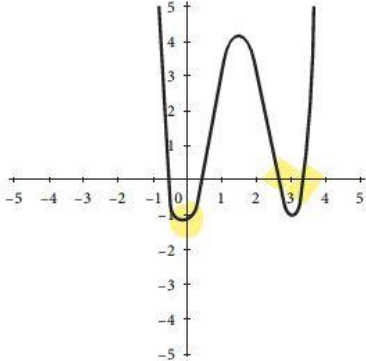
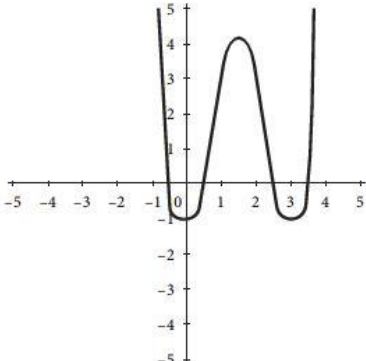
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	Corrected	<p>Linear inequalities in one or two variables</p> <hr/> <p>This is an example of a linear inequality in one variable, $ax + b < c$ where a, b, and c are real numbers.</p> <p>If $a = 1$, $b = 4$, and $c = 10$,</p> $1(x) + 4 < 10$ $x < 10 - 4$ $x < 6$ <p>For a linear inequality in two variables, $ax + by < c$, where a, b, and c are real numbers, and b is not equal to 0:</p> <p>If $a = 2$, $b = 3$, $c = 20$ and $y = 1$;</p> $2x + 3y < 20$ $2x + 3(1) < 20$ $2x < 17$ $x < \frac{17}{2}$ $x < 8.5$
24	Error in the book	<p>Nonlinear equations in one variable and systems of equations in two variables</p> <hr/> <p>When <i>nonlinear equations</i> are plotted on the graphs, they give curves or nonlinear representations on the coordinate axis, while <i>linear equations</i> give straight lines (see the diagram below).</p> 
	Corrected	<p>Nonlinear equations in one variable and systems of equations in two variables</p> <hr/> <p>When <i>nonlinear equations</i> are plotted on the graphs, they give curves or nonlinear representations on the coordinate axis, while <i>linear equations</i> give straight lines (see the diagram below).</p> 

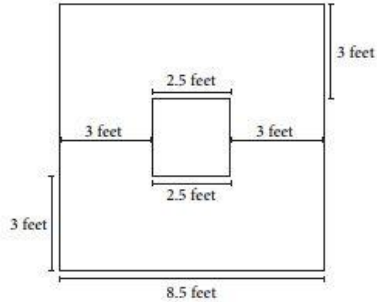
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24	Error in the book	<p>For example, in these equations, solve for y:</p> $x^2 - y = 0$ $y = x - 2$ <p>To solve this, this equation solves for y, $y = x - 2$</p> <p>Then, solve for x by substituting y in the equation $x^2 - y = 0$</p> $x^2 - x + 2 = 0$ (a quadratic equation) <p>You can use a quadratic formula to solve for x.</p> $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ <ul style="list-style-type: none"> • By elimination: You can eliminate each variable from the equation using the real values (numbers) obtained from your calculations.
	Corrected	<p>For example, in these equations, solve for y:</p> $x^2 - y = 0$ $y = x - 2$ <p>To solve this, this equation solves for y, $y = x - 2$</p> <p>Then, solve for x by substituting y in the equation $x^2 - y = 0$</p> $x^2 - x + 2 = 0$ (a quadratic equation) <p>You can use a quadratic formula to solve for x.</p> $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ <ul style="list-style-type: none"> • By elimination: You can eliminate each variable from the equation using the real values (numbers) obtained from your calculations.
29	Error in the book	<p>Two-variable data: models and scatterplots</p> <hr/> <p>In math, we use models and scatterplots to understudy and measure the distribution of two-variable data. The scatterplots can show clearly that a data set has: (i) a positive correlation; (ii) a negative correlation; or (iii) no correlation. Concerning the models, a data set may be of: (i) a linear model; (ii) a quadratic model; or (iii) an exponential model.</p>
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41		8	<p>8. Level: Medium Skill/Knowledge: Linear equations in one variable Testing Point: Creating and solving an linear equation in one variable</p> <p>Key Explanation: Choice D is correct. Begin by creating an equation to represent the total number of hours Tyrone needs to study in terms of x hours per 5 weekdays, if he studies 10 hours per day over the two weekend days:</p> $50 = 20 + 5x$ $30 = 5x$ $x = 6 \text{ hours per day}$	<p>8. Level: Medium Skill/Knowledge: Linear inequality in one variable Testing Point: Creating and solving an linear inequality in one variable</p> <p>Key Explanation: Choice D is correct. Begin by creating an inequality to represent the total number of hours Tyrone needs to study in terms of x hours per 5 weekdays. If he studies 10 hours per day over the two weekend days:</p> $50 \leq 20 + 5x$ $30 \leq 5x$ $6 \leq x$ <p>Hence, he needs to study atleast 6 hours every week day.</p>
42	10		<p>10</p> <p>When $\frac{2}{3}x + 4 = 10y$, and $x = 3$, what is the value of y?</p> <p>A) $\frac{3}{5}$</p> <p>B) $\frac{10}{13}$</p> <p>C) $\frac{18}{5}$</p> <p>D) 5</p>	<p>10</p> <p>When $\frac{2}{3}x + 4 = 10y$, and $x = 3$, what is the value of y?</p> <p>A) $\frac{3}{5}$</p> <p>B) $\frac{5}{3}$</p> <p>C) $\frac{18}{5}$</p> <p>D) 5</p>
43	16		<p>16</p> <p>Students in a geography bee score 10 points for every correctly answered question and lose 5 points for every incorrectly answered question. If a student answers 14 questions correctly but misses the final question, what is his final score?</p>	<p>16</p> <p>Students in a geography bee score 10 points for every correctly answered question and lose 5 points for every incorrectly answered question. If a student answers 14 questions correctly and the last question incorrectly, what is his final score?</p>
73	77		<p>77</p> $x + 2 \leq -1$ $x < \frac{6}{3}x + 2?$ <p>Which of the following inequalities expresses the domain of x-coordinates that satisfy the system of inequalities above?</p> <p>A) $x \leq -1$</p> <p>B) $x \geq -1$</p> <p>C) $-2 < x \leq -3$</p> <p>D) $x \leq -3$</p>	<p>77</p> $x + 2 \leq -1$ $x < \frac{6}{3}x + 2?$ <p>Which of the following inequalities expresses the domain of x-coordinates that satisfy the system of inequalities above?</p> <p>A) $x \leq -1$</p> <p>B) $x \geq -1$</p> <p>C) $x \leq -3$ or $x > -2$</p> <p>D) $x \leq -3$</p>

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77		75	<p>Key Explanation: Choice C is the correct option. Given $6x + 14 \geq 4x + 24$, the way to solve an absolute value equation is to split into two linear inequalities as follows: $6x + 14 \geq 4x + 24$ or $6x + 14 \leq -(4x + 24)$. Thus subtracting 14 from both sides of the first inequality results in $6x \leq 4x + 10$. Subtracting $4x$ from both sides of the first inequality yields $2x \leq 10$. Dividing both sides by 2 results in $x \leq 5$. Only Choice C has this as a possible answer.</p>	<p>Key Explanation: Choice D is the correct option. Given $6x + 14 \geq 4x + 24$, the way to solve an absolute value inequality is to split into two linear inequalities as follows: $6x + 14 \geq 4x + 24$ or $6x + 14 \leq -(4x + 24)$. Thus subtracting 14 from both sides of the first inequality results in $6x \geq 4x + 10$. Subtracting $4x$ from both sides of the first inequality yields $2x \geq 10$. Dividing both sides by 2 results in $x \geq 5$. Subtracting 14 from both sides of the second inequality results in $6x \leq -4x - 38$. Adding $4x$ to both sides of the inequality results in $10x \leq -38$. Dividing both sides of the inequality by 10 results in $x \leq \frac{-38}{10}$, which is equivalent to $x \leq \frac{-19}{5}$.</p>
79		83	<p>Key Explanation: Choice A is correct. To find the range of the possible values of the expression $r - s$, subtract the opposite boundary limits of the two variables. To get the minimum boundary of $r - s$, subtract the maximum boundary of s from the minimum boundary of r which yields $20 - 60 = -40$. To get the maximum boundary of $r - s$, subtract the minimum boundary of s from the maximum boundary of r which yields $30 - 40 = -10$. Therefore, the correct answer is $-40 < r - s < -10$.</p>	<p>Key Explanation: Choice A is correct. To find the minimum value of $r - s$, we use the minimum value of r and the maximum value of s. $\therefore r - s > 20 - 60 \rightarrow r - s > -40$i and To find the maximum value of $r - s$, we use the maximum value of r and the minimum value of s. $\therefore r - s < 30 - 40 \rightarrow r - s < -10$ii Combining both equations $-40 < r - s < -10$.</p>
86		89	<p>Key Explanation: Choice C is correct. To simplify the expression, use distributive property which yields $x^2 - 5x + 4x - 12 - 8$. Combining like terms yields $x^2 - x - 20$. The equation can be simplified once more by factoring which yields $(x - 5)(x + 4)$.</p>	<p>Key Explanation: Choice C is correct. To simplify, use distributive property which yields: $x^2 - 5x + 4x - 20$. Taking x common from the first two terms and 4 common from the next two terms, we get: $x(x - 5) + 4(x - 5)$ Taking $(x - 5)$ common from both terms we get: $(x - 5)(x + 4)$</p>
89		103	<p>Key Explanation: Choice C is correct. B is the value of the remainder when $2x^2 + 6x - 11$ is divided by $x - 3$. The remainder would be the value of $f(3)$. Substituting 3 to x in $2x^2 + 6x - 11$ yields $2(3)^2 + 6(3) - 11$ or 25.</p>	<p>Key Explanation: Choice C is correct. Taking LCM on RHS of the equation, $\frac{(2x + 12)(x - 3) + B}{(x - 3)}$ $\frac{2x^2 - 6x + 12x - 36 + B}{(x - 3)}$ Comparing the constant term on both sides of the equation, we get: $-11 = B - 36$ $\therefore B = 36 - 11 = 25$.</p>

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90		105	<p>Key Explanation: 6 is the correct answer. If $b = a$, then $a^{\frac{3}{2}} \cdot b^{\frac{1}{3}} = a^{\frac{3}{2}} \cdot a^{\frac{1}{3}}$. Since the bases are the same, the exponents should therefore be added.</p> <p>Adding the exponents yields $\frac{3}{2} + \frac{1}{3} = \frac{9+2}{6} = \frac{11}{6}$.</p> <p>Equating the two expressions yields $a^{\frac{11}{6}} = \sqrt[6]{a^{11}}$.</p> <p>Rewriting the right side of the equation in exponential form yields $a^{\frac{11}{6}} = a^{\frac{11}{6}}$. Matching the exponents yields $p = 6$.</p>	<p>Key Explanation: 6 is the correct answer. If $b = a$, then $a^{\frac{3}{2}} \cdot b^{\frac{1}{3}} = a^{\frac{3}{2}} \cdot a^{\frac{1}{3}}$. Since the bases are the same, the exponents should therefore be added.</p> <p>Adding the exponents yields $\frac{3}{2} + \frac{1}{3} = \frac{9+2}{6} = \frac{11}{6}$.</p> <p>Equating the two expressions yields $a^{\frac{11}{6}} = \sqrt[6]{a^{11}}$.</p> <p>Rewriting the right side of the equation in exponential form yields $a^{\frac{11}{6}} = a^{\frac{11}{6}}$. Matching the exponents yields $p = 6$.</p>
94		110	<p>When sides of an equation are squared, there can be extraneous solutions created, Thus, both -6 and -1 need to be checked into the original equation to see if there are any extraneous solutions. When -6 is substituted for m in the original equation, the result is $-6 + 4 = -6 + 10$. Simplifying it yields $-2 = 2$. Since the statement is false, the -6 is not valid.</p> <p>When -1 is substituted for m in the original equation, the result is $-1 + 4 = -1 + 10$. Simplifying the equation yields $3 = 3$. Since the statement is true, then -1 is a valid solution. Therefore, $m = -1$.</p>	<p>When sides of an equation are squared, there can be extraneous solutions created, Thus, both -6 and -1 need to be checked into the original equation to see if there are any extraneous solutions. When -6 is substituted for m in the original equation, the result is $-6 + 4 = \sqrt{-6 + 10}$. Simplifying it yields $-2 = 2$. Since the statement is false, -6 is not valid.</p> <p>When -1 is substituted for m in the original equation, the result is $-1 + 4 = \sqrt{-1 + 10}$. Simplifying the equation yields $3 = 3$. Since the statement is true, then -1 is a valid solution. Therefore, $m = -1$.</p>
99		130	<p>130</p>  	<p>130</p> 

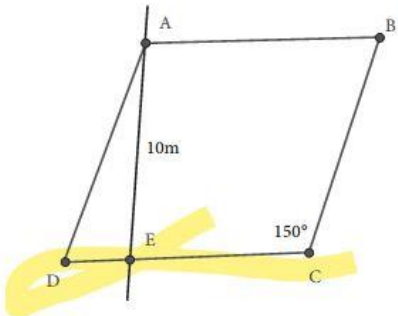
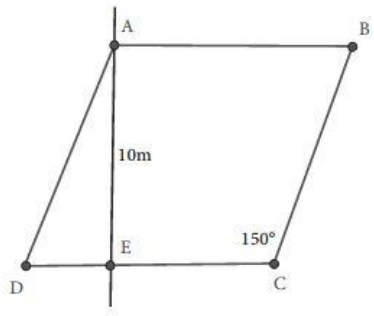
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101		135	<p>135</p> 	<p>135</p> 
106	160		<p>160</p> <p>How many integer solutions does the equation below have?</p>	<p>160</p> <p>How many integer solutions does the inequality below have?</p>
114		153	<p>Key Explanation: Choice B is correct. The graph shown represents a quadratic function. To create the quadratic equation, use the vertex form $y - k = (x - h)^2$ where (h, k) is the vertex of the graph. Therefore, when $(-1, -4)$ is substituted into the vertex form equation, it yields $y + 4 = (x + 1)^2$. This is equivalent to $y = (x + 1)^2 - 4$.</p>	<p>Key Explanation: Choice B is correct. The graph shown represents a quadratic function. To create the quadratic equation, use the vertex form $y - k = (x - h)^2$ where (h, k) is the vertex of the graph. Therefore, when $(-1, -4)$ is substituted into the vertex form equation, it yields $y + 4 = (x + 1)^2$. This is equivalent to $y = (x + 1)^2 - 4$.</p>
115		156	<p>Using distributive property to simplify the expression yields $x^2 + 4x + 4 + x + 2$.</p> <p>Combining like terms yields $x^2 + 5x + 6$.</p> <p>Factoring the expression yields $(x + 2)(x + 3)$.</p>	<p>Taking $(x + 2)$ common</p> $f(x + 2) = (x + 2) [(x + 2) + 1] = (x + 2) (x + 3)$ <p>$\therefore f(x + 2) = (x + 2) (x + 3)$</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected
115		157	<p>Key Explanation: Choice A is correct. First substitute the algebraic expressions for $g(x)$ in the numerator and for $f(x)$ in the denominator of the fraction. Factor both numerator and denominator as follows:</p> <p>The denominator can be factoring using the difference of two squares $a^2 - b^2 = (a + b)(a - b)$ where $a = x$ and $b = 6$ resulting in $f(x) = (x + 6)(x - 6)$.</p> <p>The numerator is difficult to factor as it can't be factored by grouping. The easiest way to factor it is to assume that $(x + 6)$ might be a factor of it since it is a factor of the denominator. Since all terms in the numerator are positive, $(x - 6)$ cannot be a factor of the numerator. Using long division or synthetic division, divide $(x + 6)$ into the numerator. This results in $x^2 + 12x + 36$. This expression is easily factored into $(x + 6)(x + 6)$.</p> <p>Cancelling out like terms between the numerator and denominator results in</p> $\frac{(x+6)^3}{x^2-36} = \frac{(x+6)^3}{(x+6)(x-6)} = \frac{(x+6)^2}{x-6} = \frac{x^2+12x+36}{x-6}$ <p>or Choice A.</p>	<p>Key Explanation: Choice A is correct. First substitute the algebraic expressions for $g(x)$ in the numerator and for $f(x)$ in the denominator of the fraction. Factor both numerator and denominator as follows:</p> <p>The denominator can be simplified using the difference of two squares $a^2 - b^2 = (a + b)(a - b)$ where $a = x$ and $b = 6$ resulting in $f(x) = (x + 6)(x - 6)$.</p> $g(x) = x^3 + 18x^2 + 108x + 216$ $g(x) = x^3 + 6^3 + 18x(x + 6)$ $a^3 + b^3 = (a + b)(a^2 + b^2 - ab)$ $\therefore x^3 + 6^3 = (x + 6)(x^2 + 36 - 6x)$ $g(x) = (x + 6)(x^2 + 36 - 6x) + 18x(x + 6)$ <p>Taking $(x + 6)$ common:</p> $g(x) = (x + 6)(x^2 + 36 + 12x)$ $\therefore \frac{g(x)}{f(x)} = \frac{(x+6)(x^2+36+12x)}{(x+6)(x-6)}$ <p>Cancelling common factor $(x + 6)$ in both the numerator and denominator:</p> $\frac{g(x)}{f(x)} = \frac{x^2 + 36 + 12x}{x - 6}$
124		172	<p>Key Explanation: The perimeter of a square field is found by 4 (length of one side). First, convert all units to inches. The length of one side of the square field is 2.5 which would be $(2.5 \times 12) = 30$ inches. This is the value of one side of the square field. If there is a margin of 36 inches around the field, the length of one side of the fence would be $30 + 36$ inches = 66 inches. The perimeter would therefore be $4(66) = 264$ inches.</p>	<p>Key Explanation:</p>  <p>The diagram shows a large square with a side length of 8.5 feet. Inside it is a smaller square with a side length of 2.5 feet. The space between the two squares is 3 feet wide on all four sides. The total height of the large square is labeled as 8.5 feet, and the total width is also labeled as 8.5 feet. The height of the inner square is labeled as 2.5 feet, and its width is also labeled as 2.5 feet. The distance from the top side of the inner square to the top side of the outer square is labeled as 3 feet. Similarly, the distance from the bottom side of the inner square to the bottom side of the outer square is labeled as 3 feet. The distance from the left side of the inner square to the left side of the outer square is labeled as 3 feet, and the distance from the right side of the inner square to the right side of the outer square is labeled as 3 feet.</p> $36 \text{ inches} = \frac{36}{12} = 3 \text{ feet.}$ <p>Length of fenced region = $(2.5 + 3 + 3)$ feet Length of fenced region = 8.5 feet Perimeter of fence = $4 \times l = 4 \times 8.5 = 34$ feet Perimeter (inches) = $34 \times 12 = 408$ inches</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected
125		176	<p>Key Explanation: If Martha tutors three individual students for one hour each at the rate of \$20 an hour, she will make $3 \times \\$20 = \\60. Alternatively, if Martha tutors three pairs of students for one hour each at the rate of \$25 an hour, she will make $3 \times \\$25 = \\75. Therefore, the difference in the two profits is $\\$75 - \\$60 = \\$15$.</p>	<p>Key Explanation: If Martha tutors three individual students for one hour each at the rate of \$20 an hour, she will make $3 \times \\$20 = \\60. Alternatively, if Martha tutors three pairs of students for one hour each at the rate of \$25 an hour, she will make $3 \times \\$25 = \\75. Therefore, the difference in the two earnings is $\\$75 - \\$60 = \\$15$.</p>
127	184		<p>184</p> <p>A school is renovated so that it is 15% larger than before. If the school currently has a maximum capacity of 744 students after the renovation, what is the maximum capacity (in number of students) it can hold before the renovation (round it to the nearest number)?</p>	<p>184</p> <p>A school is renovated so that it is 15% larger than before. If the school currently has a maximum capacity of 744 students after the renovation, what is the maximum capacity (in number of students) it could hold before the renovation (round it to the nearest number)?</p>
131		189	<p>Key Explanation: During the End of Year Sale, the price of the dress is 30% off which means that it is 70% off its original price. 70% of \$200 = \$140. Amanda has a further 12% off coupon. This would make the price of the dress to be 88% of \$140 = \$123.20.</p>	<p>Key Explanation: During the End of Year Sale, the dress is available at a discount of 30%, which means that it is 70% of its original price. 70% of \$200 = \$140. Amanda has a further 12% off coupon. This would make the price of the dress 88% of \$140 = \$123.20.</p>
131		190	<p>Key Explanation: Choice B is correct. The price of fuel in 2013 would be the price of fuel before the decrease in 2014. The price in 2016 can be found like this: $\frac{17.28}{1.2} = \\$14.40$. The price in 2013 would be $\frac{\\$14.40}{0.9} = \\16 which is the price before the decrease or the price in 2013.</p>	<p>Key Explanation: Choice B is correct. Let price of fuel in 2013 = x. Since price decreases by 10% between 2014 and 2016, Price at the end of 2016 = $x - \frac{10}{100}(x) = 0.9x$. Since price increases by 20% between 2017 and 2019. Price at the end of 2019 = $0.9x + \frac{20}{100}(0.9x)$ Price at the end of 2019 = $0.9x + 0.18x = 1.08x$ Given price at the end of 2019 = \$17.28 $\therefore 1.08x$ corresponds to \$17.28. x corresponds to $\frac{17.28}{1.08} = \\$16$. \therefore Price of fuel in 2013 = \$16.</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected
131		191	<p>Key Explanation: Choice C is correct. The percentage increase is found by $\frac{\text{Increase in price}}{\text{Original price}} \times 100\%$. In this case, the price of a chocolate bar moves from \$0.60 to \$2.40. This would yield $\frac{2.40 - 0.60}{0.60} \times 100\% = \frac{1.80}{0.60} \times 100\% = 300\%$.</p>	<p>Key Explanation: Choice C is correct. The percentage increase is found by $\frac{\text{Increase in price}}{\text{Original price}} \times 100\%$. In this case, the price of a chocolate bar increases from \$0.60 to \$2.40. This would yield $\frac{2.40 - 0.60}{0.60} \times 100\% = \frac{1.80}{0.60} \times 100\% = 300\%$.</p>
132		194	<p>Key Explanation: Choice D is correct. Assuming k is the positive integer, the equation will be 20% of $k = 60\%$ of 200.</p>	<p>Key Explanation: Choice D is correct. Let k be the positive integer. Hence, the equation will be 20% of $k = 60\%$ of 200.</p>
136		197	<p>Key Explanation: Choice C is correct. To find the median value of the data set, start by finding the total number of students in the school, which yields $74 + 73 + 81 + 90 + 75 + 82 = 475$. Since the total number of students is odd, then the expression to get the median is $\frac{n+1}{2}$ where n is the total population. Substituting the data yields $\text{Median} = \frac{475+1}{2} = 238$. Therefore, the 238th student from the lowest to the highest grade is the median. Add the number of students per level to accumulate 238. The composition of students will be 74 from 2nd grade, 73 from 3rd grade, 81 from 4th grade, and 10 from 5th grade. Therefore, the 238th student is in the 5th grade.</p>	<p>Key Explanation: 5th grade is correct. To find the median value of the data set, start by finding the total number of students in the school, which yields $74 + 73 + 81 + 90 + 75 + 82 = 475$. Since the total number of students is odd, then the expression to get the median is $\frac{n+1}{2}$ where n is the total population. Substituting the data yields $\text{Median} = \frac{475+1}{2} = 238$. Therefore, the 238th student from the lowest to the highest grade is the median. Add the number of students per level to accumulate 238. The composition of students will be 74 from 2nd grade, 73 from 3rd grade, 81 from 4th grade, and 10 from 5th grade. Therefore, the 238th student is in the 5th grade.</p>
137		205	<p>Key Explanation: The correct answer is $\frac{8}{3}$. The mean of the data set is given by $\frac{\text{sum of the values}}{\text{no. of the values}}$. The sum of the 12 values is $(13 \times 1) + (14 \times 2) + (15 \times 4) + (17 \times 2) + (18 \times 1) + (20 \times 1) = 173$. The mean would therefore be $\frac{173}{11} = 15\frac{8}{11}$ or 15.727. The median of 11 data is given by the average of the 6th data, which would be 15. The difference between the mean and the median would be $\left(15\frac{8}{11} - 15\right) = \frac{8}{11}$.</p>	<p>Key Explanation: The correct answer is 0.727. Number of data points = 11 Median value = value of the $\frac{11+1}{2} = 6^{\text{th}}$ data point. Median = 15 Mean = $\frac{(13 \times 1) + (14 \times 2) + (15 \times 4) + (17 \times 2) + (18 \times 1) + (20 \times 1)}{11}$ Mean = $\frac{(13 + 28 + 60 + 34 + 18 + 20)}{11}$ Mean = $\frac{173}{11} = 15.727$. \therefore Difference between Mean and Median = $15.727 - 15 = 0.727$.</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected																																
139	210		According to the data in the graph of $f(x)$ above, how many hours have passed when $f(x) = 1$?	According to the data in the graph of $f(x)$ above, _____ hours have passed since $f(x) = 1$?																																
141	214		The scatterplot above shows the relationship between the outdoor temperature and the water consumption for a camper on a 10-day camping trip. One day is not included in the scatter plot where the temperature was $97^\circ F$. Based on the line of best fit, which of the following is closest to the amount of water consumed by the camper on that day?	The scatterplot above shows the relationship between the outdoor temperature and the water consumption for a camper on a 10-day camping trip. One day is not included in the scatter plot where the temperature was $98^\circ F$. Based on the line of best fit, which of the following is closest to the amount of water consumed by the camper on that day?																																
142	216		For how many days actual temperatures does the line of best fit predict a higher temperature?	On how many days does the line of best fit predict a temperature higher than the actual temperature?																																
146		214	Key Explanation: Choice C is correct. Identify $97^\circ F$ on the x -axis. Then identify the intersection on the line of best fit which is at $y = 75$.	Key Explanation: Choice C is correct. Identify $98^\circ F$ on the x -axis. Then identify the intersection on the line of best fit which is at $y = 75$.																																
150	230		<p>230</p> <p>A restaurant has 102 items on the menu. The menu contains either dairy-free or gluten-free items and these items either contain nuts or not.</p> <table border="1"> <thead> <tr> <th></th> <th>Gluten-free</th> <th>Dairy-free</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>With nuts</td> <td></td> <td>32</td> <td>50</td> </tr> <tr> <td>Without nuts</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>48</td> <td></td> <td>102</td> </tr> </tbody> </table>		Gluten-free	Dairy-free	Total	With nuts		32	50	Without nuts					48		102	<p>230</p> <p>A restaurant has 102 items on the menu. The menu contains either dairy-free or gluten-free items and these items either contain nuts or don't.</p> <table border="1"> <thead> <tr> <th></th> <th>Gluten-free</th> <th>Dairy-free</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>With nuts</td> <td></td> <td>32</td> <td>50</td> </tr> <tr> <td>Without nuts</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>48</td> <td></td> <td>102</td> </tr> </tbody> </table>		Gluten-free	Dairy-free	Total	With nuts		32	50	Without nuts				Total	48		102
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166	261		<p>261</p> <p>The radius of a sphere is equal to the length of a cube. If the cube has a surface area of 54 cm^2, what is the volume of the sphere in terms of π?</p> <p>A) 9π B) 18π C) 27π D) 36π</p>	<p>261</p> <p>The radius of a sphere is equal to the length of a side of a cube. If the cube has a surface area of 54 cm^2, what is the volume of the sphere in terms of π?</p> <p>A) 9 B) 18 C) 27 D) 36</p>																																

Page No.	Question No.	Answer No.	Error in the book	Corrected
180	279		<p>279</p>  <p>In the above figure, quadrilateral $ABCD$ is a parallelogram. AE is perpendicular to CD and $AE = 10$ meters is the length of BC?</p>	<p>279</p>  <p>In the above figure, quadrilateral $ABCD$ is a parallelogram. AE is perpendicular to CD and $AE = 10$ meters. What is the length of BC?</p>
183		279	<p>Key Explanation: Choice C is correct.</p> <p>Since adjacent angles of a parallelogram are supplementary, then $\angle D = 180^\circ - \angle C$.</p> <p>Substituting the value of $\angle C$ yields $\angle D = 180^\circ - 150^\circ = 30^\circ$. Since $AE \perp CD$, then $\angle AED = 90^\circ$.</p> <p>Applying the angle sum property of a triangle to find the value of $\angle DAE$ yields $\angle DAE = 180^\circ - 30^\circ - 90^\circ = 60^\circ$. Therefore, $\triangle AED$ is a special right triangle (0 - 60 - 90).</p> <p>We know that the ratio of the sides will be $1 : \sqrt{3} : 2$.</p> <p>Given the length of $AE = 10$ meters, then the length of $AD = 2$ times the length of AE which is $2 \times 10 = 20$.</p> <p>Since the length of opposite sides of a parallelogram are equal, then $AD = BC$.</p> <p>Therefore, $BC = 20m$.</p>	<p>Key Explanation: Choice C is correct. Given AE is perpendicular to CD.</p> <p>Since $\angle ABC$ and $\angle BCD$ are supplementary angles, $\angle ABC + 150^\circ = 180^\circ$</p> $\angle ABC = 30^\circ$ <p>Similarly $\angle BCD$ and $\angle CDA$ are supplementary.</p> $\angle CDA = 30^\circ = \angle EDA$ <p>From $\triangle ADE$</p> $\sin(\angle EDA) = \frac{AE}{AD}$ $\sin 30^\circ = \frac{10}{AD}$ $\frac{1}{2} = \frac{10}{AD}$ $AD = 20$ <p>Since opposite sides of a parallelogram are equal in length, $AD = BC = 20m$.</p>
188	299		<p>299</p> <p>The circumference of circle A is $2k$ and the circumference of circle B is $36k$. What is the ratio of the area of circle A to circle B?</p> <p>A) 1 to 36 B) 1 to 18 C) 1 to 324 D) 4 to 324</p>	<p>299</p> <p>The circumference of circle A is $2k$ and the circumference of circle B is $36k$. What is the ratio of the area of circle A to circle B?</p> <p>A) 1 : 36 B) 1 : 18 C) 1 : 324 D) 4 : 324</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected
189		290	<p>Key Explanation: Choice B is correct. To find an endpoint of a circle, find the equation of a circle from the center and the radius: The equation of a circle in standard form is $(x - h)^2 + (y - k)^2 = r^2$ where (h, k) is the center of the circle and r is the radius.</p> <p>Substituting the given center and radius yields $(x - 1)^2 + (y - 3)^2 = (17)^2$.</p> <p>Simplifying the right side of the equation yields $(x - 1)^2 + (y - 3)^2 = 17$.</p> <p>To identify which points lies on the circle, substitute the values to the equation of the circle.</p>	<p>Key Explanation: Choice B is correct. To find an endpoint of a circle, find the equation of a circle from the center and the radius: The equation of a circle in standard form is $(x - h)^2 + (y - k)^2 = r^2$ where (h, k) is the center of the circle and r is the radius.</p> <p>Substituting the given center and radius yields $(x - 1)^2 + (y - 3)^2 = (\sqrt{17})^2$.</p> <p>Simplifying the right side of the equation yields $(x - 1)^2 + (y - 3)^2 = 17$.</p> <p>To identify which points lie on the circle, substitute the values to the equation of the circle.</p>
196	2*		<p>The average score in a high school's French entrance exam was 65%. Three new students appeared for the entrance exam and scored 25%, 45%, and 70%; the new average score fell to 60%. How many students had taken the entrance exam before these three students?</p>	<p>The average score in a high school's French entrance exam was 65. Three new students appeared for the entrance exam and scored 25, 45, and 0; the new average score fell to 60. How many students had taken the entrance exam before these three students?</p>
196	5*		<p>The function $c(x)$ represents the total cost of a company. The function represents the variable costs and fixed costs of the company. $c(x) = x^2 - 750x + 90,000$, where x represents the number of units produced by the company. How many units would the company have to produce to incur a minimum total cost?</p>	<p>The function $c(x)$ represents the total expenses of a company. The function represents the variable expenses and fixed expenses of the company. $c(x) = x^2 - 750x + 90,000$, where x represents the number of units produced by the company. How many units would the company have to produce to incur a minimum total expense?</p>
198	16*		<p>A circle has a radius of 6cm. If a sector in the circle has an area of 7.5, what is the value of the angle that subtends the sector at the center in radians?</p>	<p>A circle has a radius of 6cm. If a sector in the circle has an area of 7.5π, what is the value of the angle that subtends the sector at the center in radians?</p>
204	2#		<p>The number of people who own houses compared to those who rent houses in city L is represented by the ratio 2:3. If the people in city K, with a population of 623,000 are twice as likely to own a house compared to those in city L, then approximately how many people rent houses in city K?</p>	<p>The number of people who own houses compared to those who rent houses in city L is represented by the ratio 2:5. If the people in city K, with a population of 623,000 are twice as likely to own a house compared to those in city L, then approximately how many people rent houses in city K?</p>

Page No.	Question No.	Answer No.	Error in the book	Corrected												
205	8#		$3y > 2x + 5$ $y \leq x + 3$ <p>Which of the following is a solution to the inequality below?</p>	$3y > 2x + 5$ $y \leq x + 3$ <p>Which of the following is a solution to the system of inequalities above?</p>												
210			<table border="1" style="width: 100%; text-align: center;"> <tr> <td>10</td> <td>-10</td> <td></td> <td>10</td> <td>160</td> <td></td> </tr> </table>	10	-10		10	160		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>10</td> <td>10</td> <td></td> <td>10</td> <td>160</td> <td></td> </tr> </table>	10	10		10	160	
10	-10		10	160												
10	10		10	160												
212		5*	<p>Key Explanation: Choice B is correct. The number of units that would represent the minimum total cost is the x-coordinate of the vertex of the given function. The x-coordinate of the vertex can be solved using the formula $\frac{-b}{2a}$ where a and b are the coefficients of x^2 and x, respectively. Substituting the values of a and b yields $\left(\frac{-b}{2a}\right) = \left(\frac{-750}{2}\right) = 375$ units.</p>	<p>Key Explanation: Choice D is correct. $c(x) = (x^2 - 750x) + 90,000$ $(x^2 - 750x)$ represents the variable expenses and 90,000 represents the fixed expenses. In order to minimize the total expenses the variable expenses have to be minimized. Since variable expenses cannot be negative, The minimum variable expenses = 0 $x^2 - 750x = 0$ $x^2 = 750x$ (Dividing both sides by x) $x = 750$ units</p>												
212		6*	<p>Key Explanation: To solve for this quadratic equation, use the quadratic formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$, where $a = -2$, $b = 3$ and $c = 6$. Substituting the values yields $\frac{-3 \pm \sqrt{3^2 - 4(-2)(6)}}{2(-2)} = \frac{3 \pm \sqrt{57}}{4}$. Therefore the value of $n = 57$.</p>	<p>Key Explanation: To solve for this quadratic equation, use the quadratic formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$, where $a = -2$, $b = 3$ and $c = 6$. Substituting the values yields $\frac{-3 \pm \sqrt{3^2 - 4(-2)(6)}}{2(-2)} = \frac{-3 \pm \sqrt{57}}{-4}$. Therefore the value of $n = 57$.</p>												
213		10*	<p>Key Explanation: To move the function $f(x)$ to the left by 4 units and 2 units up, add 4 to x and add 2 to the constant which yields $f(x) = 3(x + 4) - 4 + 2$. Using distributive property yields $f(x) = 3x + 12 - 2$. Simplifying the equation yields $f(x) = 3x - 10$. The y-intercept is, therefore, -10.</p>	<p>Key Explanation: To move the function $f(x)$ to the left by 4 units and 2 units up, add 4 to x and add 2 to the constant which yields $f(x) = 3(x + 4) - 4 + 2$. Using distributive property yields $f(x) = 3x + 12 - 2$. Simplifying the equation yields $f(x) = 3x + 10$. The y-intercept is, therefore, +10.</p>												

*M1 – Module 1

#M2 – Module 2

The errata for Digital SAT® Math Practice Questions are shown in this pdf. This book had multiple print runs; this errata is applicable to print runs before Feb 21, 2024. The consecutive print runs have corrected these errors. In case you do not find the below errors in your book, it is because they have been corrected.

Page No.	Question No.	Answer No.	Error in the book	Corrected
87		94	<p>the equation by $-m_0$ to get:</p> $m_w = -m_0 \left(\left(\frac{a}{g} \right) + 1 \right), \text{ which is Choice C.}$ <p>Distractor Explanations: Choice A would be selected if a math calculation mistake was made. Choice B would be incorrectly picked if a mistake was made in isolating the correct variable. Choice D would be incorrectly picked if a mistake was made in isolating the correct variable.</p>	<p>the equation by $-m_0$ to get:</p> $m_w = -m_0 \left(\left(\frac{a}{g} \right) - 1 \right), \text{ which is Choice A.}$ <p>Distractor Explanations: Choice B would be incorrectly picked if a mistake was made in isolating the correct variable. Choice C would be selected if a math calculation mistake was made. Choice D would be incorrectly picked if a mistake was made in isolating the correct variable.</p>

*M1 – Module 1

#M2 – Module 2

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