Beginning Algebra	**Name:**
Study Guide 1	**Class:**
Due Date:	**Score:**

No Work $\Leftrightarrow$ No Points

Use Pencil Only $\Leftrightarrow$ Be Neat & Organized

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1. (2 points) Evaluate: $5^3 - 10^2 + \sqrt{100}$

1. _____

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2. (2 points) Evaluate: $10(5^3 - 2^5)$

2. _____

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3. (2 points) Evaluate: $\dfrac{4^2 + 3 \cdot 5 + 1}{2^4}$

3. _____

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4. (3 points) Evaluate: $\left(7^2 + 1\right)^2 \div \left(5^3 - 5^2\right)$

4. _____

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5. (2 points) Find the area of a triangle whose base is 160 **feet with the height of** 50 **feet.**

5. _____

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6. (2 points) Translate: 5 less than twice the square of some number. Use x for the unknown.

6. _____

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7. (3 points) Evaluate: $2^2 + 3^3 - 4^2 - 3 \cdot 5$

7. _____

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8. (3 points) Evaluate: $\sqrt{13^2 - 12^2} \cdot \sqrt{3^2 + 4^2}$

8. _____

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9. (3 points) Evaluate: $\dfrac{4^2 - 3 \cdot 5 - 1}{2^4 - 2 \cdot 8}$

9. _____

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10. Consider a rectangular lot whose length is 32 feet with the width of 15 feet.

(a) (2 points) Find its area.

(a) _____

(b) (2 points) Find its perimeter.

(b) _____

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11. (2 points) Evaluate: $(-6)^2 - 3|-12|$

11. _____

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12. A square garden has a side of 4 meters.

(a) (2 points) Find its area.

(a) _____

(b) (2 points) Find its perimeter.

(b) _____

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13. (2 points) Evaluate: $\left(2^1 - 3^2\right)^2$

13. _____

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14. (2 points) Evaluate: $\dfrac{3 \cdot (-2)^3 - 6 \cdot 4}{-5 \cdot 2 + (-3)^2}$

14. _____

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15. (2 points) Evaluate: $-3\dfrac{2}{3} \div 2\dfrac{1}{5}$

15. _____

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16. (2 points) Evaluate: $\dfrac{3}{14} - \left(\dfrac{-5}{49}\right)$

16. _____

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17. (2 points) Evaluate: $\left(\frac{2}{3} - \frac{3}{2}\right)^3$

17. _____

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18. (2 points) Evaluate $b^2 - 4ac$ **for** $a = -2, b = -5$ **and** $c = -3$**.**

18. _____

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19. (2 points) Evaluate $\left(x^y - y^x\right)^{101}$ **for** $x = 2$ **and** $y = 3$**.**

19. _____

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20. (2 points) Evaluate $\dfrac{x^2 + 2x}{x^2 - 4}$ **for** $x = -2$**.**

20. _____

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21. (2 points) Evaluate $\sqrt{x^2 - y^2}$ **for** $x = -10$ **and** $y = -8$**.**

21. _____
