

**Beginning Algebra**

**Name:**\_\_\_\_\_

**Study Guide 5**

**Class:** \_\_\_\_\_

**Due Date:** \_\_\_\_\_

**Score:**\_\_\_\_\_

**No Work  $\Leftrightarrow$  No Points**

**Use Pencil Only  $\Leftrightarrow$  Be Neat & Organized**

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- 1. (3 points)** Mr. Flores purchased a brand new telephone for his office from a local store for \$135. Find the actual price of the phone if the sale's tax rate is 8%.

**1.** \_\_\_\_\_

- 2. (3 points)** The sum of three consecutive odd integers is 11 more than twice the second one. Find all three consecutive integers.

**2.** \_\_\_\_\_

- 3. (3 points)** In triangle  $ABC$ , angles  $A$  and  $B$  are complementary angles. The measure of angle  $A$  is  $10^\circ$  less than four times the measure of  $B$ . Find the measure of all three angles.

**3.** \_\_\_\_\_

4. (3 points) In triangle  $ABC$ , two sides are equal, and the third side is 3 cm shorter than the sum of equal sides. The perimeter of this triangle is 25 cm. Find the measure of all three sides.

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4. \_\_\_\_\_

5. (3 points) In triangle  $ABC$ , the measure of all three angles are three consecutive integers. Find the measure of all three angles.

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5. \_\_\_\_\_

6. (3 points) In triangle  $ABC$ , the measure of all three angles are three consecutive even integers. Find the measure of all three angles.

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6. \_\_\_\_\_

7. (3 points) In a survey of 800 people, 50 were left-handed. At this rate, how many left-handed people are there in a gathering of 18,000 people?

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7. \_\_\_\_\_

8. (2 points) Solve  $C = \pi d$  for  $\pi$ .

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8. \_\_\_\_\_

9. (2 points) Solve  $V = \pi r^2 h$  for  $h$ .

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9. \_\_\_\_\_

10. (3 points) Solve  $V = \frac{4\pi r^3}{3}$  for  $\pi$ .

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10. \_\_\_\_\_

11. (3 points) Solve  $-5x + 3y = -15$  for the  $y$  variable.

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11. \_\_\_\_\_

12. (2 points) Solve  $3x + 2y = 0$  for the  $y$  variable.

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12. \_\_\_\_\_

13. (2 points) Solve  $y + 4 = -\frac{2}{3}(x - 6)$  for the  $y$  variable.

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13. \_\_\_\_\_

14. (3 points) Solve  $y - 2 = \frac{3}{2}(x - 3)$  for the  $y$  variable.

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14. \_\_\_\_\_

15. (2 points) Write  $\{x \mid -1 \leq x < 2\}$  in interval notation, and graph it below.

15. \_\_\_\_\_



16. (2 points) Write  $(-1.5, .5]$  in set-builder notation, and graph it below.

16. \_\_\_\_\_



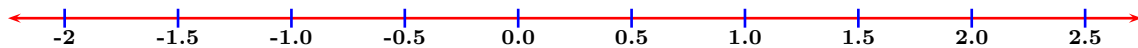
17. (2 points) Write  $\{x \mid x > -2\}$  in interval notation, and graph it below.

17. \_\_\_\_\_



18. (2 points) Write  $(-\infty, 1]$  in set-builder notation, and graph it below.

18. \_\_\_\_\_



19. (2 points) Write  $[-2, 1]$  in set-builder notation, and graph it below.

19. \_\_\_\_\_



20. (2 points) Write  $(-1, \infty)$  in set-builder notation, and graph it below.

20. \_\_\_\_\_

