

## Tompkins Cortland Community College – Mathematics Placement Program

### MATH 100 (Intermediate Algebra) Qualifying Test -

### Practice Problems Answer Sheet

Don't look at this sheet till you've worked all the test problems to the best of your ability. Then score yourself using the answers below.

Next to each answer you'll find the concept(s) that the question tested. To prepare for the real pretest, consult any textbook or tutor for that topic, and work some practice problems to bring your abilities up to snuff.

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**Answers****Algebra Concept:**

1. 1

1. Order of operations and signed numbers

2. -16

2. Evaluating algebraic expressions

3. 20

3. Evaluating algebraic formulas

4.  $2x^2 + 2xy - 4x$

4. Collecting like terms

5.  $g^2 + 2g - 3$

5. Binomial multiplication

6.  $6x^9y^5$

6. Exponential multiplication

7.  $(x + 4)(x + 3)$

7. Trinomial factoring

8.  $135a^7c^5$

8. Raising a power to a power

9.  $z^2 + 2z + 3$

9. Monomial division

10.  $-6x^3 + 15x^2 - 9x$

10. Monomial multiplication

11.  $-2 + 3k$

11. Grouping symbols

12.  $3x^2 + 3x - 7$

12. Adding polynomials

13.  $x = 5$

13. Solving linear equations

14.  $x = 5, x = -4$

14. Solving quadratic equations

15. 4

15. Slopes of lines – graphing

16.  $g^2 - g + 5$

16. Adding polynomials

17.  $78.5 \text{ cm}^2$

17. Evaluating algebraic formulas

18.  $2(n + 6) = \frac{15}{n}$

18. Writing algebraic expressions

19.  $n = \frac{pV}{RT}$

19. Solving for a variable in terms of another

20.  $100 \text{ cm}^2$

20. Evaluating algebraic formulas