

Placement Test for Algebra 2

Name: _____ Date: _____

Proctored by: _____ Grade of child: _____

Email Address: _____

Phone: _____

Grade earned (To filled out by instructor): _____

Directions: Parents please print the test (2 pages) and proctor your child while they take the test. Have your child show all work on a separate sheet of paper. Problems without work will not be counted with full credit. Please do not assist your child in any way, even to explain what the question means.

Please sign and date all pages and follow directions on where to send this test on our courses and enrollments page for this course. This test can either be returned via email or "snail" mailed. Thank you.

Simplify

1) $(-12)(-3) - (4)(-8)$

2) $2^3 \cdot 5 + 3 \cdot 5 - 4^2$

3) $(3x^2 + 2x - 5) - (2x^2 - 8x + 3)$

4) $(4x - 3y) - (2x + y)$

6) $(2x^2)(-8x^3)$

5) $(2x + 7)(x - 3)$

7) $\sqrt{81}$

8) $\frac{x+y}{3x} + \frac{x}{27y^2}$

Simplify; Write as a simplified radical

9) $\sqrt{54}$

10) $(5\sqrt{6})(4\sqrt{2})$

11) $\frac{\sqrt{10}}{\sqrt{2}}$

12) $\frac{2}{\sqrt{3}}$

Continue on next page

Plot the following points on the xy-axis. Use graph paper.

13) A (3,2) B (-1, 5) C (0, -2) D (6, 0) E (-4, -1) F (5, -3)

Solve the system of equations for (x, y). Show your work.

14) $2x - y = -10$
 $3x + 4y = 7$

Solve for the variable. Show your work.

15) $8x + 5 = 2x - 7$

16) $4y - 2 + 3y = 15 + y - 5$

17) $\frac{x}{8} - \frac{1}{6} = \frac{1}{6}$

18) $x^2 + 8^2 = 10^2$

19) $\frac{3}{2x+5} = \frac{1}{x+1}$

20) $\frac{2}{x} = \frac{x}{18}$

21) $x^2 - 2x - 24 = 0$

22) $3x - 5 < x + 11$

Factor the following:

23) $4x^2 - 25$

24) $3x^2 + 5x - 28$