

Sample College Algebra Pre-test

Name: _____

This test evaluates readiness for MA203 College Algebra

ANSWERS

1. Evaluate $x^2 + 3x$ for $x = 8$ *Answer: 88*
2. Evaluate $\frac{7(x-2)}{y-1}$ for $x = 3$ and $y = -2$ *Answer: $-\frac{7}{3}$*
3. Is the following statement true or false? True $4 \geq -7$
4. Is the following statement true or false? False $-3 > 2$
5. $5(3x - 2) + 12x$ *Answer: $27x - 10$*
6. $4 - 2[6 - (7y + 2)] - 3y$ *Answer: $-4 + 11y$*
7. $(-2)^5$ *Answer: -32*
8. -3^3 *Answer: -27*
9. $\frac{3^2}{3^3}$ *Answer: $1/3$*
10. $(x^{-3})^4$ *Answer: x^{-12}*
11. $(-9x^2y)(-2x^5y^{-4})$ *Answer: $18x^7y^{-3}$ or $\frac{18x^7}{y^3}$*
12. $\left(\frac{4x^4}{3y^3}\right)^{-2}$ *Answer: $\frac{9y^6}{16x^8}$ or $\frac{9}{16}x^{-8}y^6$*
13. $3\sqrt{18} + 5\sqrt{50}$ *Answer: $34\sqrt{2}$*
14. $\sqrt{(-12)^2}$ *Answer: 12*
15. $\sqrt{\frac{48x^3}{3x}}$ *Answer: $4x$*
16. $(\sqrt{2x^2})(\sqrt{6x})$ *Answer: $2x\sqrt{3x}$*
17. $(7x^{1/3})(2x^{3/4})$ *Answer: $14x^{13/12}$*
18. $(36x^{10}y^4)^{1/2}$ *Answer: $6x^5y^2$*
19. $(2y + 3)(7y - 8)$ *Answer: $14y^2 + 5y - 24$*
20. $(x^3 - 4xy + 5xy^2 - y^2) - (3x^3 - xy^2 + y^2)$ *Answer: $-2x^3 - 4xy + 6xy^2 - 2y^2$*