

Classwork 3
Intermediate Algebra MTH 35
Topic: Exponents

Name: _____

Simplify the following expressions.

1. $x^2x^3x^5$ ANSWER _____

2. $x^2y^2x^4y^3$ ANSWER _____

3. $xyzx^2y^3z^4$ ANSWER _____

4. $\frac{x^3}{x^2}$ ANSWER _____

5. $\frac{x^5}{x^2x^6}$ ANSWER _____

6. $\frac{x^5x^3}{x^4}$ ANSWER _____

7. $\frac{x^2y^3}{y^2x^5}$ ANSWER _____

8. $\frac{xy}{x^3y^2z}$ ANSWER _____

9. $\frac{1}{x^{-2}}$ ANSWER _____

10. $(xy)^{-3}$ ANSWER _____

11. $x^{-2}x^4x^3$

ANSWER _____

12. $\frac{x^{-1}x^7}{x^2x^{-3}}$

ANSWER _____

13. $\frac{x^{-1}y^2}{y^{-2}x^3}$

ANSWER _____

14. $\frac{x^2z^2}{y^2x^4} \frac{y^3x}{z^4x^2y}$

ANSWER _____

15. $(x^2)^2x^3$

ANSWER _____

16. $(y^3)^2(y^2)^3$

ANSWER _____

17. $(xy)^2x^3y^2$

ANSWER _____

18. $(xyz)^4x^2z^{-3}y^{-1}$

ANSWER _____

19. $\frac{x^{-1}y^2}{y^{-2}x^3}$

ANSWER _____

20. $\frac{x^3y^{-7}}{y^4x^{-3}}$

ANSWER _____