**Assignment: Multiply/Divide Monomials & Negative Exponents**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

**Simplify.**

1. $-x^{2}∙x^{3}∙x$ 11. $\frac{8x^{3}y^{6}}{24x^{9}y^{3}}$

2. $(3x^{2})(8x^{5})$ 12. $\frac{27x^{3}y}{18x^{2}y^{4}}$

3. $(-2r^{3}s^{4})(6r^{2}s)$ 13. $\frac{5ab^{4}c^{2}}{10a^{2}b^{4}c}$

4. $(15xy^{2})\left(\frac{1}{3}x^{2}z^{3}\right)(y^{3}z^{4})$ 14. $\frac{-6x^{2}y^{3}z}{36x^{4}y^{6}z^{2}}$

5. $(-3a^{2}b)(-2b^{3})(-a^{3}b^{2})$ 15. $x^{-2}y^{-5}$

6. $(7x^{2})(xy^{5})(2x^{3}y^{2})$ 16. $c^{-2}d$

7. $(-4a^{3}bc^{2})(a^{3}b^{2}c)(3ab^{4}c^{5})$ 17. $\frac{a^{-7}b^{2}}{c^{3}d^{-4}}$

8. $\frac{15x^{6}}{5x^{6}}$ 18. $\frac{-100s^{3}t^{-5}}{25s^{-2}t^{6}}$

9. $\frac{a^{5}b^{6}}{a^{3}b^{7}}$ 19. $\frac{-68m^{5}n^{-3}}{4m^{-3}n^{6}}$

10. $\frac{8d^{5}}{4d^{3}}$ 20. $\left(\frac{3x^{2}}{y^{3}}\right)^{-1}$