

Math Plus U5D3 Homework KEY

Simplify each of the following. Your answer should contain positive exponents only!		
<p>1. x^{-5}</p> $\frac{1}{x^5}$	<p>2. $3m^{-2}$</p> $\frac{3}{m^2}$	<p>3. $-7a^{-4}b^3$</p> $\frac{-7b^3}{a^4}$
<p>4. $6x^8 \cdot -3x^{-7}$</p> $-18x^1$	<p>5. $(3x^3)^{-2}$</p> $\frac{1}{9x^6}$	<p>6. $(5y^2)^{-2}$</p> $\frac{1}{25y^4}$
<p>7. $(-8x^5y^{-4})^{-2}$</p> $\frac{1}{64}x^{-10}y^8 = \frac{y^8}{64x^{10}}$	<p>8. $(a^{-3}b^8c^{-12})(a^7b^{-3}c)$</p> $a^2b^5c^{-5} = \frac{a^2b^5}{c^5}$	<p>9. $(x^2y^3)^{-2} \cdot (x^5y^4)^{-3}$</p> $x^{-4}y^{-6} \cdot x^{-15}y^{-12} = \frac{1}{x^{19}y^{18}}$
<p>10. $(4x^3y^6)^{-2} + (2x^2y^4)^{-3}$</p> $\frac{1}{16}x^{-6}y^{-12} + \frac{1}{8}x^{-6}y^{-12} = \frac{3}{16}x^{-6}y^{-12} = \frac{3}{16x^6y^{12}}$	<p>11. $\frac{h^4}{h^6} = h^{-2}$</p> $= \frac{1}{h^2}$	<p>12. $\frac{k^{-2}}{k^7} = k^{-9}$</p> $= \frac{1}{k^9}$
<p>13. $\frac{14w^4}{7w^{-2}}$</p> $2w^6$	<p>14. $\frac{-24x^5}{3x^{-2}}$</p> $-8x^7$	<p>15. $\frac{4c^1}{8c^5} = c^{-4}$</p> $= \frac{1}{c^4}$
<p>16. $\frac{x^4y^{-3}}{x^2y^2}$</p> $x^2y^{-5} = \frac{x^2}{y^5}$	<p>17. $\frac{32a^5b^{-3}}{8a^{-2}b^6}$</p> $4a^7b^{-9} = \frac{4a^7}{b^9}$	<p>18. $\frac{36x^{-4}y^8}{12y^7}$</p> $3x^{-4}y = \frac{3y}{x^4}$