

Day	Title	Pg
10	Product of Powers 1.3	?

- | | | |
|--|-------------------|---|
| Multiplication | | Division |
| ① multiply Coefficients
② Add Exponents | (Big)
(Little) | ① Divide Coefficients
② Subtract Exponents |

Got it? problems pg 24-25 a-i

a) $9^3 \cdot 9^2 = 9^{3+2} = 9^{\boxed{5}}$

b) $a^3 \cdot a^2 = a^{3+2} = a^{\boxed{5}}$

c) $-2m(-8m^5) = -2 \cdot -8 \cdot m^{1+5} = \boxed{16} m^{\boxed{6}}$

d) $\frac{4^8}{4^2} = 4^{8-2} = 4^{\boxed{6}}$

e) $\frac{x^{10}}{x^3} = x^{10-3} = x^{\boxed{7}}$

f) $\frac{12w^5}{2w} = \frac{12}{2} \cdot w^{5-1} = \boxed{6} w^{\boxed{4}}$

g) $\frac{3^4 \cdot 5^2 \cdot 7^5}{3^2 \cdot 5 \cdot 7^3} = 3^{4-2} \cdot 5^{2-1} \cdot 7^{5-3} = 3^{\boxed{2}} \cdot 5^{\boxed{1}} \cdot 7^{\boxed{2}}$

h) $\frac{5^6 \cdot 7^4 \cdot 8^3}{5^4 \cdot 7^2 \cdot 8^2} = 5^{6-4} \cdot 7^{4-2} \cdot 8^{3-2} = 5^{\boxed{2}} \cdot 7^{\boxed{2}} \cdot 8^{\boxed{1}}$

i) $\frac{(-2)^5 \cdot 3^4 \cdot 5^7}{(-2)^2 \cdot 3 \cdot 5^4} = (-2)^{5-2} \cdot 3^{4-1} \cdot 5^{7-4} = (-2)^{\boxed{3}} \cdot 3^{\boxed{3}} \cdot 5^{\boxed{3}}$