

Exponents

Name: _____

Date: _____

Evaluate the Exponents.

1) $8b^{-4}c^3 \times 5bc^{-2} =$ _____

2) $\left(\frac{2a}{ab}\right)^5 \times \left(\frac{2a}{ab}\right)^{-10} =$ _____

3) $\left(\frac{1}{3}\right)^5 \times \left(\frac{1}{3}\right)^2 \times \left(\frac{1}{3}\right)^4 =$ _____

4) $25n^{-14} \times 20n^7 =$ _____

5) $8b \times 9b^3 \times b^{-9} =$ _____

6) $bc \times 8b^{-5}c^{-3} =$ _____

7) $\left(\frac{3}{4x}\right)^3 \times \left(\frac{3}{4x}\right)^4 =$ _____

8) $2n^4 \times 3n^{-7} \times 6n^{-6} =$ _____

9) $3m^4 \times 5m^{-5} =$ _____

10) $\left(\frac{6a}{7}\right)^{-2} \times \left(\frac{6a}{7}\right)^{12} =$ _____

11) $ab \times 9a^{-3}b^{-6} =$ _____

12) $6m \times 9m^{-9} =$ _____

13) $4x^{-2}y^2 \times 7x^4y^{-6} =$ _____

14) $\left(\frac{16y}{4y}\right)^9 \times \left(\frac{16}{4y}\right)^5 =$ _____

15) $\left(\frac{15}{3b}\right)^{11} \times \left(\frac{21}{3b}\right)^7 =$ _____

16) $9a^2b^{-5} \times 2a^{-2}b^{-8} =$ _____

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Evaluate the Exponents.

1) $8b^{-4}c^3 \times 5bc^{-2} = \frac{40c}{b^3}$

2) $\left(\frac{2a}{ab}\right)^5 \times \left(\frac{2a}{ab}\right)^{-10} = \frac{b^5}{32}$

3) $\left(\frac{1}{3}\right)^5 \times \left(\frac{1}{3}\right)^2 \times \left(\frac{1}{3}\right)^4 = \left(\frac{1}{3}\right)^{11}$

4) $25n^{-14} \times 20n^7 = \frac{500}{n^7}$

5) $8b \times 9b^3 \times b^{-9} = \frac{72}{b^5}$

6) $bc \times 8b^{-5}c^{-3} = \frac{8}{b^4c^2}$

7) $\left(\frac{3}{4x}\right)^3 \times \left(\frac{3}{4x}\right)^4 = \left(\frac{3}{4x}\right)^7$

8) $2n^4 \times 3n^{-7} \times 6n^{-6} = \frac{36}{n^9}$

9) $3m^4 \times 5m^{-5} = \frac{15}{m}$

10) $\left(\frac{6a}{7}\right)^{-2} \times \left(\frac{6a}{7}\right)^{12} = \left(\frac{6a}{7}\right)^{10}$

11) $ab \times 9a^{-3}b^{-6} = \frac{9}{a^2b^5}$

12) $6m \times 9m^{-9} = \frac{54}{m^8}$

13) $4x^{-2}y^2 \times 7x^4y^{-6} = \frac{28x^2}{y^4}$

14) $\left(\frac{16y}{4y}\right)^9 \times \left(\frac{16}{4y}\right)^5 = \frac{4^{14}}{y^5}$

15) $\left(\frac{15}{3b}\right)^{11} \times \left(\frac{21}{3b}\right)^7 = \frac{5^{11}7^7}{b^{18}}$

16) $9a^2b^{-5} \times 2a^{-2}b^{-8} = \frac{18}{b^{13}}$