

## Practice with Exponents

Date \_\_\_\_\_

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**Simplify. Your answer should contain only positive exponents.**

1)  $8x^4y^5 \cdot 7x^5$

2)  $11a^5b^4 \cdot 11ba^6$

3)  $2m^5n^5 \cdot 4nm^0 \cdot 5m^3$

4)  $4xy^3 \cdot 11x^3y^6$

5)  $8y^6 \cdot 4x^6y^3$

6)  $9n^4 \cdot 4m^6n^3$

7)  $\frac{6x^5}{10x^3}$

8)  $\frac{3a^4}{10a^3}$

9)  $\frac{4n^2}{4n^2}$

10)  $\frac{3x^5}{8x^3}$

11)  $\frac{8n^4}{9n^3}$

12)  $\frac{3k^4}{9k^2}$

13)  $(7y^4)^3$

14)  $(8m^3n^0)^2$

15)  $(3a^2b^2)^0$

16)  $(4m^4n^2)^3$

17)  $\left(\frac{y^3}{x^4}\right)^2$

18)  $\left(\frac{a^4b^5c^7}{a^2b^4c^4}\right)^2$

## Practice with Exponents

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**Simplify. Your answer should contain only positive exponents.**

1)  $8x^4y^5 \cdot 7x^5$

$56x^9y^5$

2)  $11a^5b^4 \cdot 11ba^6$

$121a^{11}b^5$

3)  $2m^5n^5 \cdot 4nm^0 \cdot 5m^3$

$40m^8n^6$

4)  $4xy^3 \cdot 11x^3y^6$

$44x^4y^9$

5)  $8y^6 \cdot 4x^6y^3$

$32y^9x^6$

6)  $9n^4 \cdot 4m^6n^3$

$36n^7m^6$

7)  $\frac{6x^5}{10x^3}$

$\frac{3x^2}{5}$

8)  $\frac{3a^4}{10a^3}$

$\frac{3a}{10}$

9)  $\frac{4n^2}{4n^2}$

1

10)  $\frac{3x^5}{8x^3}$

$\frac{3x^2}{8}$

11)  $\frac{8n^4}{9n^3}$

$\frac{8n}{9}$

12)  $\frac{3k^4}{9k^2}$

$\frac{k^2}{3}$

13)  $(7y^4)^3$

$343y^{12}$

14)  $(8m^3n^0)^2$

$64m^6$

15)  $(3a^2b^2)^0$

1

16)  $(4m^4n^2)^3$

$64m^{12}n^6$

17)  $\left(\frac{y^3}{x^4}\right)^2$

$\frac{y^6}{x^8}$

18)  $\left(\frac{a^4b^5c^7}{a^2b^4c^4}\right)^2$

$a^4b^2c^6$