

Name : _____

Simplifying Expressions: Exponents

MS2

Simplify each expression.

1) $\frac{16r^{-5}s^{-2}}{12r^{-2}s^{-4}}$

2) $(15a^6b^{-4}c^{-5})(-4a^{-2}b^6c^9)$

3) $(-8c^{10}d^4)(-5c^{-3}d^3)$

4) $11p^{-3}q^{-2}r^{-5}$

5) $(3t^4uv^{-2})^4$

Gain complete access to the largest
collection of worksheets in all subjects!

$t^5)(7s^{-3}t^2)$

7) $\frac{14w^{-2}x^{10}y^{-1}}{2w^{-12}x^{-3}y^{-20}}$

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

9) $\left(\frac{4u^{-10}v^3}{3u^{-5}v^2}\right)^2$

10) $\frac{90x^6yz^4}{10x^2y^{-8}z^{-3}}$

Name : _____

Answer key

Simplifying Expressions: Exponents

MS2

Simplify each expression.

1) $\frac{16r^{-5}s^{-2}}{12r^{-2}s^{-4}}$

$\frac{4s^2}{3r^3}$

2) $(15a^6b^{-4}c^{-5})(-4a^{-2}b^6c^9)$

$-60a^4b^2c^4$

3) $(-8c^{10}d^4)(-5c^{-3}d^3)$

$40c^7d^7$

4) $11p^{-3}q^{-2}r^{-5}$

5) $(3t^4uv^{-2})^4$

$\frac{81t^{16}u^4}{v^8}$

6) $t^5(7s^{-3}t^2)$

7) $\frac{14w^{-2}x^{10}y^{-1}}{2w^{-12}x^{-3}y^{-20}}$

$7w^{10}x^{13}y^5$

9) $\left(\frac{4u^{-10}v^3}{3u^{-5}v^2}\right)^2$

$\frac{16v^2}{9u^{10}}$

10) $\frac{90x^6yz^4}{10x^2y^{-8}z^{-3}}$

$9x^4y^9z^7$

PREVIEW

Gain complete access to the largest collection of worksheets in all subjects!

Members, please log in to download this worksheet.

Not a member? Please sign up to gain complete access.

www.mathworksheets4kids.com