

## Negative Exponents

Simplify. Your answer should contain only positive exponents.

1)  $3r \cdot 4r^{-3}$

2)  $6m^5 \cdot m$

3)  $4x^{-6} \cdot 4x^3$

4)  $5n^4 \cdot n^6$

5)  $3x^{-6} \cdot 6x^3$

6)  $4x \cdot 5x^{-3}$

7)  $(a^{-2}b^3)^3$

8)  $(n^3)^2$

$$9) (3x^{-3})^{-1}$$

$$10) (n^{-1})^2$$

$$11) -\frac{10y^8}{9x^6y^8}$$

$$12) \frac{4x^{-6}y^5}{-x^4y^9}$$

$$13) \frac{-10a^{-4}b^7}{-8a^7b^9}$$

$$14) \frac{2x^{10}y^{-4}}{-5x^9y^{-10}}$$

$$15) \frac{8a^{10}}{-10a^6b^{-8}}$$

$$16) \frac{5u^6}{5u^3}$$

## Negative Exponents

Simplify. Your answer should contain only positive exponents.

1)  $3r \cdot 4r^{-3}$

$$\frac{12}{r^2}$$

2)  $6m^5 \cdot m$

$$6m^6$$

3)  $4x^{-6} \cdot 4x^3$

$$\frac{16}{x^3}$$

4)  $5n^4 \cdot n^6$

$$5n^{10}$$

5)  $3x^{-6} \cdot 6x^3$

$$\frac{18}{x^3}$$

6)  $4x \cdot 5x^{-3}$

$$\frac{20}{x^2}$$

7)  $(a^{-2}b^3)^3$

$$\frac{b^9}{a^6}$$

8)  $(n^3)^2$

$$n^6$$

$$9) (3x^{-3})^{-1}$$

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

$$10) (n^{-1})^2$$

$$\frac{1}{n^2}$$

$$11) -\frac{10y^8}{9x^6y^8}$$

$$-\frac{10}{9x^6}$$

$$12) \frac{4x^{-6}y^5}{-x^4y^9}$$

$$-\frac{4}{x^{10}y^4}$$

$$13) \frac{-10a^{-4}b^7}{-8a^7b^9}$$

$$\frac{5}{4a^{11}b^2}$$

$$14) \frac{2x^{10}y^{-4}}{-5x^9y^{-10}}$$

$$-\frac{2xy^6}{5}$$

$$15) \frac{8a^{10}}{-10a^6b^{-8}}$$

$$-\frac{4b^8a^4}{5}$$

$$16) \frac{5u^6}{5u^3}$$

$$u^3$$