

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Operations with Exponents

Simplify the exponents.

1)  $\frac{6^3}{6^2}$

7)  $\frac{8w^3}{3w^2g^6}$

2)  $\left(\frac{1}{n}\right)^4 \cdot \left(\frac{1}{n}\right)^2$

8)  $(3b^3 \cdot b^2)^3$

3)  $\frac{3h}{8h^3}$

9)  $7 \cdot 7^2$

4)  $z^4c^2 \cdot 3z^5c^3 \cdot 9zc^5$

10)  $(2gh^2)^5$

5)  $(2c^2 \cdot c \cdot 3)^3$

11)  $\frac{5s^2}{6s^4}$

6)  $5y \cdot 8y^5$

12)  $(2n^2 \cdot 3n^2)^3$



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## Operations with Exponents

Simplify the exponents.

$$1) \frac{6^3}{6^2}$$
$$6$$

$$2) \left(\frac{1}{n}\right)^4 \cdot \left(\frac{1}{n}\right)^2$$
$$\left(\frac{1}{n}\right)^6$$

$$3) \frac{3h}{8h^3}$$
$$\frac{3}{8h^2}$$

$$4) z^4 c^2 \cdot 3z^5 c^3 \cdot 9zc^5$$
$$27z^{10} c^{10}$$

$$5) (2c^2 \cdot c \cdot 3)^3$$
$$216c^9$$

$$6) 5y \cdot 8y^5$$
$$40y^6$$

$$7) \frac{8w^3}{3w^2 g^6}$$
$$\frac{8w}{3g^6}$$

$$8) (3b^3 \cdot b^2)^3$$
$$27b^{15}$$

$$9) 7 \cdot 7^2$$
$$7^3$$

$$10) (2gh^2)^5$$
$$32g^5 h^{10}$$

$$11) \frac{5s^2}{6s^4}$$
$$\frac{5}{6s^2}$$

$$12) (2n^2 \cdot 3n^2)^3$$
$$216n^{12}$$

