

**MATH 10****Grade 9 Review**

1. Use the exponent laws to rewrite each expression as a single power.

a)  $(x^3)(x^5)$

b)  $\frac{y^8}{y^2}$

c)  $\frac{(b^5)(b)}{b^2}$

2. Use the exponent laws to rewrite each expression as a single power.

a)  $(x^5)^2$

b)  $\frac{y^7}{(y^2)^3}$

c)  $(b^2)^3(b^4)^4$

3. Simplify each expression.

a)  $(2x^3)^2$

b)  $(4y^2)^3$

c)  $(3x^6y^5)^2$

4. Evaluate.

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

b)  $5 \div \frac{2}{3}$

c)  $\frac{3^{25}}{(-3^4)^5}$

5. What is the missing number?

a)  $2^{\square} = 32$

b)  $\left(\frac{1}{2}\right)^{\square} = \frac{1}{16}$

c)  $(-3)^{\square} = 81$

d)  $\left(\frac{1}{3}\right)^{\square} = \frac{1}{27}$