

Bathroom breaks are to be  
taken before class!!

Do **NOT** move the desk!!

Turn your phone **OFF**!!

Put your phone up!!

Sit down!! Be quiet!!

Prepare to work!!

**Keep your hands to yourself!!**

# Review for Test

$$1) \quad \underline{3x^5} (-7x)^2$$

$$(-7x)(-7x)$$

$$(\underline{3x^5})(\underline{49x^2})$$

$$147x^7$$

$$2) \quad \underline{4} \underline{x} \underline{y} \quad (\underline{-3} \underline{x^3} \underline{y}) \quad (\underline{2} \underline{x} \underline{y^4})$$

$$-24 x^5 y^6$$

$$3) \quad \underline{5} \underline{x^a} \underbrace{(\underline{-2x^3})(\underline{-3x})}$$

$$30 x^{4+a}$$

$$\underbrace{(-2x \cdot x \cdot x)}_{6x^4} (-3x)$$

$$4) \quad \frac{1}{2} (4x^3)^2$$

$$\left(\frac{1}{2}\right) \left(\frac{16x^6}{\phantom{2}}\right)$$

$$8x^6$$

$$5) \left( \underset{\uparrow}{-} \frac{X^2}{\underline{\quad}} \right)^3$$

$$-X^6$$

$$b) \frac{(2x^m)^3 (x^2)^m}{(8x^{3m}) (x^{2n})}$$

$$\frac{(8x^{3m}) (x^{2n})}{(8x^{3m}) (x^{2n})}$$

$$8x^{5m}$$

$$\begin{aligned} 7) & \quad \frac{(3n)^2 (-4m)^3}{(9n^2) (-64m^3)} + \frac{(2m)^3 (-7n)^2}{(8m^3) (49n^2)} \\ & \quad \frac{-576n^2m^3}{-184m^3n^2} + \frac{392m^3n^2}{49n^2} \\ & \quad -184m^3n^2 \end{aligned}$$



$$\begin{aligned}
 & 8) \quad (2a^4)(3ab)^2 - \frac{(2b)^2(3a)^3}{\phantom{(2a^4)(3ab)^2}} \\
 & \quad \frac{(2a^4)(9a^2b^2) - (4b^2)(27a^3)}{\phantom{(2a^4)(3ab)^2}} \\
 & \quad \frac{18a^6b^2 - 108b^2a^3}{\phantom{(2a^4)(3ab)^2}} \\
 & \quad -90a^3b^2
 \end{aligned}$$

$$\begin{aligned} a) & \frac{(3m)^4 (-8m)^2 + (5m^5)(3m)}{(81m^4)(64m^2) + (5m^5)(3m)} \\ & \frac{5184m^6 + 15m^6}{5199m^6} \end{aligned}$$

$$10) \quad \underline{(-2x)^4 (4xy^3)} - \underline{(3x)^4 (-12xy^3)}$$

$$\underline{(16x^4) (4xy^3)} - \underline{(81x^4) (-12xy^3)}$$

$$\underline{64x^5y^3} + (+ \underline{972x^5y^3})$$

$$1036x^5y^3$$

$$\text{iii) } \underline{\underline{-7x}} (\underline{5x} - \underline{4y})$$
$$-35x^2 + 28xy$$

$$12) \quad \frac{m^2 n^2 (m^3 n + 3n)}{m^5 n^3 + 3m^2 n^3}$$

$$13) \underline{\underline{-7mR}} \left( \underline{12m} - \underline{7R} + \underline{5} \right)$$
$$-84m^2R + 49mR^2 - 35mR$$

$$14) \quad \frac{\underline{p}q^2 (\underline{p^3q} - \underline{qr})}{p^4q^3 - qpq^2r}$$

$$15) \quad \underline{\underline{7a}} (\underline{a} - \underline{4b})$$

$$7a^2 - 28ab$$