GGG Check-in

Complete the half sheet Check-In **on your own**. This should only take a few minutes.

Don't forget to show your thinking!

The rangers at the local nature preserve are keeping track of how many deer there are. The population is growing exponentially.

After year 1 there are 320 deer. After year 2 there are 344.

What is the growth factor?

$344/320 = 1.075$

What is the growth rate?

7.5%

Write an equation to calculate how many deer (d) there will be after y years.

$$d = 298(1.075)^y$$

Simplify:

$$2x^3y^5 \cdot (3x^3)^2$$

$18x^{(12)}y^5$ $18x^9y^5$

When in doubt, expand it out!

$$2x^3y^5 \cdot (3x^3)^2$$

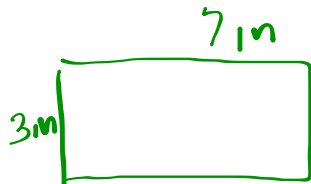$$2 \cdot x^3 \cdot y^5 \cdot 3x^3 \cdot 3x^3$$

$$= 18x^9y^5$$

Using the MCAS Reference Sheet

To find area of rectangle

Write the formula you will use:

$$A = L \cdot W \qquad \text{or} \qquad A = b \cdot h$$

7 in

3 in

- substitute in values you know $A = L \cdot W$

- multiply $= 3 \cdot 7$

- write answer $= 21$

$$21 \ in^2$$

8-1 **Practice**

Multiplying Monomials

WHEN IN DOUBT, EXPAND IT OUT!

Simplify.

3. $(-5x^2y)(3x^4)$

4. $(2ab^2c^2)(4a^3b^2c^2)$

5. $(3cd^4)(-2c^2)$

6. $(4g^3h)(-2g^5)$

7. $(-15xy^4)\left(-\dfrac{1}{3}xy^3\right)$

8. $(-xy)^3(xz)$

9. $(-18m^2n)^2\left(-\dfrac{1}{6}mn^2\right)$

10. $(0.2a^2b^3)^2$

11. $\left(\dfrac{2}{3}p\right)^2$

**12.** $\left(\dfrac{1}{4}cd^3\right)^2$

13. $(0.4k^3)^3$

14. $[(4^2)^2]^2$

Using the MCAS Reference Sheet, find the areas and volumes of the following figures. **Always write the formula you will be using first before substituting in values.** Use 3.14 for the value of π.
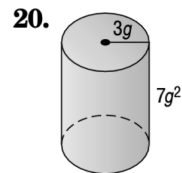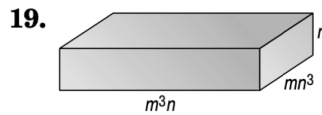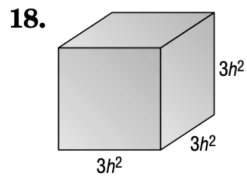
GEOMETRY Express the area of each figure as a monomial.

15.

$3ab^2$

$6a^2b^4$

16.

$5x^3$

17.

$6ac^3$

$4a^2c$

GEOMETRY Express the area of each figure as a monomial.

25.

x^2

x^5

26.

cd

cd

27.

$4p$

$9p^3$
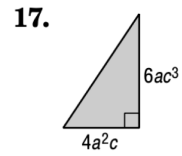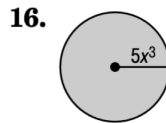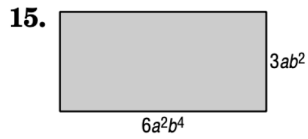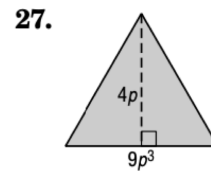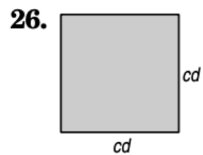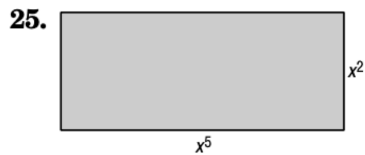
GEOMETRY Express the volume of each solid as a monomial.

18.

$3h^2$

$3h^2$

$3h^2$

19.

n

mn^3

m^3n

20.

$3g$

$7g^2$

Homework

Finish classwork