Name _____ Date _____

***Ready*® Mathematics**

Unit 3 Mid-Unit Assessment

Form A

Solve the problems.

1 A store starts the day with 36 packages of juice boxes. Each package contains the same number of juice boxes. By the end of the day, there are only 8 packages of juice boxes left.

Part A

Write an expression with two terms to represent the number of juice boxes the store sold.

Part B

Simplify your expression to create an equivalent expression.

2 Which expressions equal 32? Choose all that apply.

A 2^5

B $\frac{4^3}{2}$

C $2^3 \cdot 2 + 2$

D $5^2 \cdot 3 - (8 \cdot 5)$

E $\frac{(4 + 5)^2 - 17}{2}$

3 Mr. Suarez orders a cube of clay for his art classes. The height of the cube is 12 inches. Write and simplify an exponential expression to find how much clay Mr. Suarez ordered.

Show your work.

Mr. Suarez ordered _____ cubic inches of clay.

4 Consider the expression $7x^2 + 9 + 3x$. Tell whether each statement is *True* or *False*.

a. The expression has three terms. ☐ True ☐ False

b. The coefficient of x is 3. ☐ True ☐ False

c. The expression can be simplified to $10x^2 + 9$. ☐ True ☐ False

d. The constant term is 9. ☐ True ☐ False

5 Which statement shows equivalent expressions?

A $5(x - 2) = 5x - 3$

B $3(x + 6) + x = 4x + 9$

C $8(2x + 3) = 16x + 24$

D $4(5x + 2) - 6 = 20x + 14$

6 Kari and Julie are practicing for basketball tryouts. Kari makes 3 less than twice as many baskets as Julie.

Part A

Write an expression with two terms for the number of baskets that Kari makes. Explain how you found your expression.

_____

_____

_____

Part B

Write an expression with three terms for the number of baskets that Kari and Julie make in all. Explain how you found your expression.

_____

_____

_____

Part C

If Julie makes 18 baskets, how many baskets does Kari make? How many baskets do they make in all?

Show your work.

Kari makes _____ baskets.

Kari and Julie make _____ baskets in all.

7 Divit is 4 years younger than twice his brother's age. Which expression could be used to find Divit's age?

A $4x - 2$

B $2x - 4$

C $4 - 2x$

D $2 - 4x$

8 Evaluate: $53 - 3^2 \cdot 2$