

Ready® Mathematics**Unit 3 Unit Assessment****Form A****Solve the problems.**

- 1** Carlos provides dog-walking services in his neighborhood. For each walk he charges a flat fee of \$5 for clean-up and \$6 per dog. Write an equation to represent the relationship between the total charge, c , and the number of dogs he walks, d .
- 2** What is the constant in the expression $8x^3 + 5 + 7x^2 + 6x$?
- A** 8
- B** 5
- C** 7
- D** 6
- 3** A company sells ear buds for \$17 each. At the end of the week, they have sold \$731 worth of ear buds. How many ear buds did they sell? Write and solve an equation to find the answer.
- Show your work.**

The company sold _____ ear buds.



Unit 3 Unit Assessment *continued***Form A**

- 4** Leanna opens a savings account with an initial balance of \$100. She then deposits \$50 each month. Use an equation, a table, and a graph to explain the relationship between the amount of money in the account, a , and the number of months since Leanna opened the account, m .

Part A

Write an equation to represent the problem. Explain how the value of a changes as m increases.

Part B

Make a table to show the relationship between m and a . Find 5 ordered pairs.

Part C

Use your table from Part B to draw a graph to represent the situation.



Unit 3 Unit Assessment *continued***Form A**

5 Which value makes the equation $3x - 6 = 36$ true?

- A 10
- B 12
- C 14
- D 16

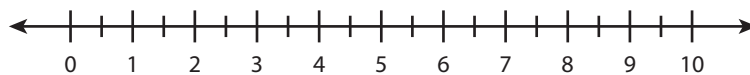
6 Sean wants to practice his soccer skills for at least 2.5 hours this week.

Part A

Write an inequality to represent the number of hours Sean will spend practicing this week.

Part B

Graph the solution to your inequality from Part A on the number line below.



7 Which expression is equivalent to $75x - 25x$? Choose all that apply.

- A 50
- B 100
- C $50x$
- D $x(75 - 25)$
- E $x(75 - 25x)$



Unit 3 Unit Assessment *continued***Form A**

- 8** Stephanie accidentally hit a golf ball through her neighbor's square window with side length x . She needs to buy a new piece of glass to replace the one she broke.

Part A

Write a variable expression for the area of the glass piece Stephanie needs to replace.

Part B

If the window is 20 in. wide, what is the area of the glass piece Stephanie needs to replace?

Part C

If Stephanie has a budget of \$100, what is the most she can pay per square inch of glass to replace the window described in Part B? Explain.



Unit 3 Unit Assessment *continued***Form A**

9 Consider the possible solution to each inequality. Choose *Yes* or *No* for each question.

a. Is 8.3 a solution of $73.8 \leq 9x$? Yes No

b. Is 6.5 a solution of $12x < 78$? Yes No

c. Is -7 a solution of $-9x > 45$? Yes No

d. Is 17 a solution of $15 - x \geq -2$? Yes No

e. Is 6 a solution of $x + 12 > 18$? Yes No

10 If each equation below is solved for x , for which equation is $x = 8$ the solution? Choose all that apply.

A $3x = 24$

B $7x = 56$

C $9x = 17$

D $13 - x = 21$

E $x - 15 = -7$

11 Evaluate: $(9 - 3)^2 + 5 \div \frac{1}{3}$.

