EXPRESSIONS

Unit 3 Review

#1

Evaluate each expression.

a. 2^4 b. -3^5 c. $(-4)^2$

a. 16 b. -243 c. 16

#2

Write in exponential form.

a. $5 \cdot c \cdot c \cdot d$

b. $7 \cdot e \cdot f \cdot f \cdot -3 \cdot e$

a. $5c^2d$ b. $-21e^2f^2$

#3

Simplify the expression.

$$[5^2 + (18 \div 9 + 2^2)]$$

31

#4

Evaluate the expression.

$a^2 + 4a + 10 - a$ for $a = -4$

14

#5

Use the GCF to write an equivalent expression.

$36x + 84$

$12(3x + 7)$

#6

Write each phrase as an algebraic expression

a. The quotient of 23 and a number increased by 51.

b. 10 less than the product of a number and 3.

a. $23 \div (x + 51)$ b. $3a - 10$

#7

Use the expression to identify the following:

$7c^3 + 3c^2 - 2cd - d + 4c^3 + 15 - 8$

a. Number of terms:
b. Name the terms:
c. Name the constants:
d. Name the coefficients:
e. Name the like terms:

#8

Simplify the expression.

$4(6n + 9) - 10n$

$14n + 36$

#9

Simplify the expression.

$7k - 2(3k + 1) - 9$

k - 11

#10

Simplify the expression.

$-4(-2x - 7) + 6x - 7$

$14x + 21$

#11

Simplify the expression.

$9 - 3(-4 + 3x) + 12x$

$3x + 21$

#12

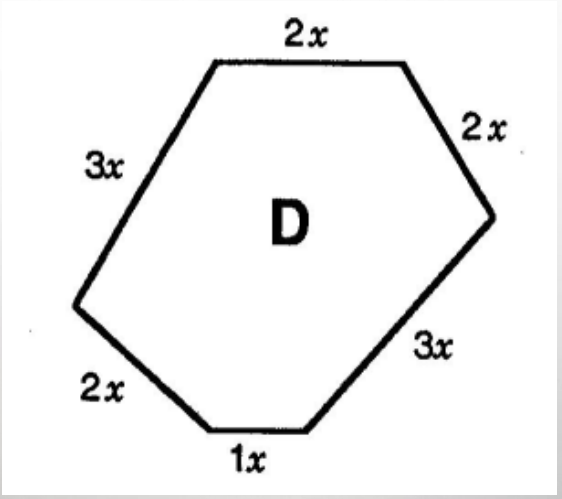
Simplify the expression.

$3(-u - 5) + 8(2u + 1)$

13u - 7

#13

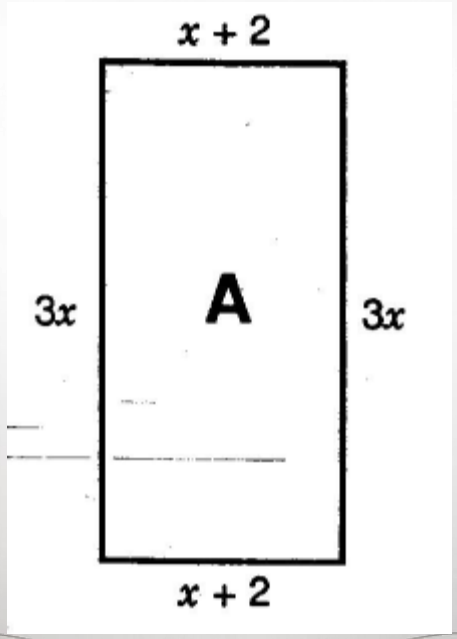
Write an expression to represent the perimeter of the figure in simplest form.



13x

#14

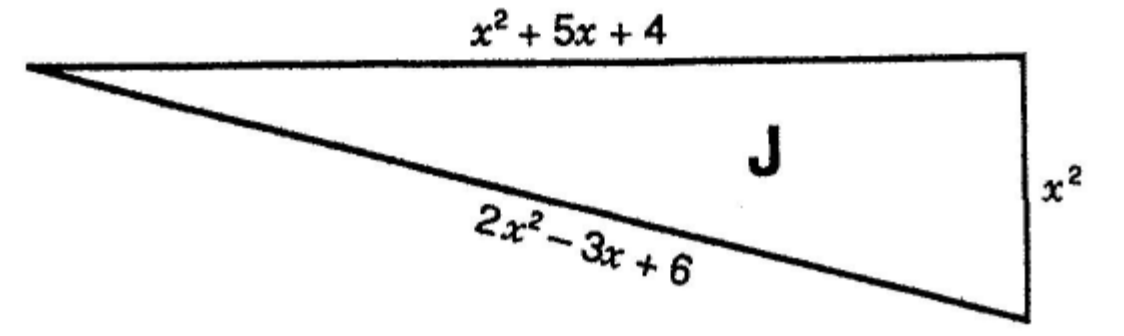
Write an expression to represent the perimeter of the figure in simplest form.



8x + 4

#15

Write an expression to represent the perimeter of the figure in simplest form.



$4x^2 + 2x + 10$