

Express Yourself

1. Which of the equations below will answer the following question? Check (✓) **all** that apply.

"I think of a number, add 7 and then multiply by 4.
My answer is 80. What was my number?"

$$x + 28 = 80$$

$$4(x + 7) = 80$$

$$4x + 7 = 80$$

$$4x + 28 = 80$$

Explain your answers.

Find the value of x .

2. Look at the four diagrams below:

Diagram A	Diagram B	Diagram C	Diagram D
$2x+4$ <div>Find the Area of the rectangle.</div> <div>2</div>	$2x+2$ <div>Find the Area of the rectangle.</div> <div>2</div>	$2x$ <div>Find the Perimeter of the rectangle.</div> <div>2</div>	$x+1$ <div>Find the Perimeter of the square.</div>

Which diagram **does not** result in the expression $4x + 4$? Explain your answer fully.

Express Yourself (continued)

3. The numbers 5, 6 and 7 are an example of consecutive numbers, as one number comes after another.

Another three consecutive numbers are added together so that the first number, plus two times the second number, plus three times the third number gives the total.

Which of these expressions could represent the total? Check (✓) **all** that apply.

$\text{Total} = x + 2x + 3x$	$\text{Total} = x + 2x + 2 + 3x + 6$
$\text{Total} = x + 2(x + 1) + 3(x + 2)$	$\text{Total} = x + (2x + 1) + (3x + 2)$

Explain your answer.

The total of the equation is 170. What are the three consecutive numbers? Explain your answer.
