Solve each equation. Show your steps.

13) 5(y-2) - 2 = 2(y + 1) - 5

14) 3(x-2) + 15 = -2(x-3) + 6x

Define a variable. Write an equation then solve.

16) The cost for a music plan is \$9.99 per year plus \$0.25 per song you download. If you paid \$113.74 one year, how many songs did you download?

Variable:	_Equation:	answer:
17) Half a number decreased by four is eighteen. Find the number.		
Variable:	_Equation:	answer:
18) Nine less than twice a number is five more than four times the number. Find the number.		
Variable:	_Equation:	answer:
19) At a concert, you purchase 2 t-shirts and a concert program for \$91. The program cost \$10 and the t-shirts all cost the same. Find the cost of each t-shirt.		
Variable:	_Equation:	answer:
20) carpet cleaner A charges \$18 plus \$12 per room. Carpet cleaner B charges \$16 plus \$18 per room. How many rooms will the total cost of both carpet cleaners be the same ?		
Variable:	_Equation:	answer:
21. Find the value of x so that the polygons have the <u>same perimeter</u> . Write an equation to solve. THEN What is the perimeter of each figure? x+2 x+3 x+3 x+2 x+3 x+2 x+3		
Variable:	_Equation:	answer:

Perimeter: