Question 1	Question 2
If x * y = xy and x # y = x – y, then find $[2*(8\#12)]\#[(3*2)\#5]$	Find the sum of the reciprocals of all the factors of 30.
Question 3	Question 4
Solve each of these equations and then evaluate $(ab)^{c-d}$ $-3a+4=8a-2$ $\frac{1}{3}b-3=\frac{3}{4}+2b$ $4(2c-1)=3(3-2c)$ $\frac{1}{1-d}=14$	Evaluate $(1{,}000{,}000{,}000{,}001)^2-(999{,}999{,}999{,}999)^2$

Question 5	Question 6
Find the value of n if the average of $3n, \frac{1}{4}, \frac{7}{8},$ and 6 is n.	The perimeter of a square is 96. A) How long is each side of the square? B) What is the area of the square?
Question 7	**Question 8**
Simplify $2\left[\frac{5-2*2+8*3}{24\div 6+4-3}\right]$	Solve for x: $-2+\lvert 2x\rvert=-6$

Question 9	Question 10
If you buy peaches at 3 for 50 cents and sell them at 5 for $1, how many must you sell to make a profit of $10?	A) If $7+4\div 2>8$, then A=5, if not then A=3 B) If $a+b=b+a$ is an example of the symmetric property of equality, then B=8, if not the B=2 C) If subtraction is commutative then C=6, if not then c=5 WHAT IS A + BC?
Question 11	Question 12
Solve each equation for x: $3x-8=-6x+1$ $2(x+3)=-4x+3$ $-2+2(x-1)=3(2x+4)$ $3x+4(3x-7)=5-3(x-1)$ Find the average of these four solutions.	Let A = the slope of 3x + 2y = 9 Let B = the y-intercept of 5x – 3y = 9 Let C = the x-intercept of 4x – y = -10 Find the value of $\frac{4A+B}{C}$

Question 13	Question 14
Evaluate the expression for x = -2 $\frac{3x^2-10x-8}{2x+2} \bullet \frac{x^2+5x+4}{x^2-16}$	Find the sum of $3\left(\frac{-1}{3}\right)^0+3\left(\frac{-1}{3}\right)^1+3\left(\frac{-1}{3}\right)^2+3\left(\frac{-1}{3}\right)^3+3\left(\frac{-1}{3}\right)^4$ Express your answer as a mixed number in simplified form.
Question 15 The side of a square is 8. If the perimeter of the square is increased by 8, by how much does the area increase?	