

You have been of for donations. Yo	a Mission contacting organizations and our answers to the following of effort to improve the lives of	questions Flectricity is unreliable, so it is
Question 1		
		give \$50,000 for food and medical supplies fo populations. The table shows the current
Villag	ge Current Population	ion
L	2200	
J	2000	
R	1900	
М	2100	
Р	1800	
person? b) Regular vineat-resis	accines must be refrigerated. stant vaccines cost \$3.25 per po	person basis. How much is allotted for each Regular vaccines cost \$2.00 per person and person. How much would each village save one village had access to reliable electricity for
	ion? Show your work or explair	

Your clinics are staffed and the

Question 2

The Department of Health decides to allocate the per person amount calculated previously, regardless of the number of villagers. Other organizations are also making donations to buy food and medicine. The United Nations has pledged to give \$4.00 per person. The United Relief has pledged to give 20% of Department of Health's new allocation.

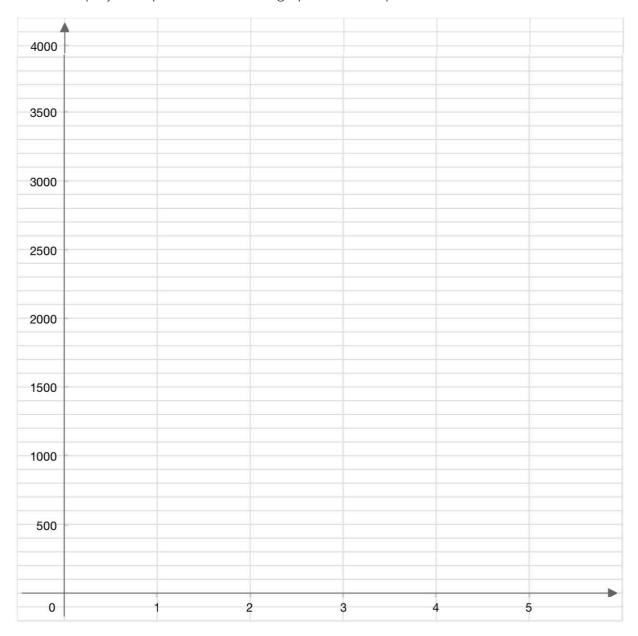
	a)	Write an equation to find how many people must live in the villages for the combined United Nations and United Relief contributions to equal the Department of Health allocation.
	b)	How many solutions does your equation have? Show how you found the answer.
Qu	est	ion 3
		solar generating system for a village costs \$14,000. Each village may choose one of the lowing options to pay for the solar system.
		tion 1: The National Utility Company will give each village an \$8000 rebate plus a utility vings of \$1.25 per person per year.
		otion 2 : The Department of Health will give \$2 per person per year plus a donation of 000.
	a)	Village L currently has 2200 people. Write an equation to show the total value of Option 1 for Village L.

	b)	Write an equation to show the total value of Option 2 for Village L.
	c)	Algebraically compute how many years it will take for the value to be the same for both options.
	d)	Explain how you could use a graph of the equations to check your answer.
Qu	est	ion 4
	ye	lage R has a current population of 1900. You expect there will be 50 babies born per ar. If the medical community can prevent any deaths, what will be the population of lage R in ten years? Show your work or explain how you found the answer.

Question 5

Write an equation to find the cost of shipping x containers of corn to Africa.
Calva value aguatian to find the east of chinning a containers of corn to Africa
Solve your equation to find the cost of shipping 3 containers of corn to Africa.
n 6
Red Star shipping company offers a special rate for shipping grain to Africa. The pany charges a \$500 docking fee plus \$600 per container.
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b) Graph your equation. (To make a graph, draw two points that should be on the line.)



c) Based on the graph, what is the cost to ship 5 containers of corn to Africa?

Question 7

	ne White Star Shipping Company also offers a special rate for shipping grain to Africa. The White Star Company charges a \$900 docking fee plus \$550 per container.
a)	Write an equation to find the cost of shipping x containers of grain to Africa.
b)	Solve your equation to find the cost of shipping 5 containers of grain to Africa.
c)	Which company offers the better deal for shipping 5 containers of grain, the Red S Company or the White Star Company?
	ion 8
۱w	vo other companies offer special rates for shipping grain to Africa.
	 The Black Line Shipping Company charges \$650 per container plus a \$600 docking fee.
	The Green Line Shipping Company charges \$550 per container plus an \$1100 docking fee.
	ow many containers must be shipped for the costs to be the same for both companiow your work or explain how you found the answer.
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