

42. **Think About a Plan** Each morning, a deli worker has to make several pies and peel a bucket of potatoes. On Monday, it took the worker 2 h to make the pies and an average of 1.5 min to peel each potato. On Tuesday, the worker finished the work in the same amount of time, but it took 2.5 h to make the pies and an average of 1 min to peel each potato. About how many potatoes are in a bucket?
- What quantities do you know and how are they related to each other?
 - How can you use the known and unknown quantities to write an equation for this situation?

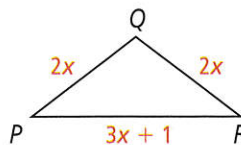
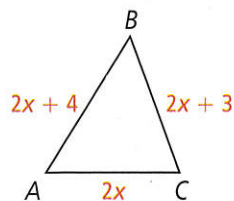
43. **Error Analysis** Describe and correct the error in finding the solution of the equation $2x = 6x$.

~~$2x = 6x$
 $\frac{2x}{x} = \frac{6x}{x}$
 $2 = 6$
 The equation has no solution.~~

44. **Skiing** A skier is trying to decide whether or not to buy a season ski pass. A daily pass costs \$67. A season ski pass costs \$350. The skier would have to rent skis with either pass for \$25 per day. How many days would the skier have to go skiing in order to make the season pass less expensive than daily passes?

45. **Health Clubs** One health club charges a \$50 sign-up fee and \$65 per month. Another club charges a \$90 sign-up fee and \$45 per month. For what number of months is the cost of the clubs equal?

46. **Geometry** The perimeters of the triangles shown are equal. Find the side lengths of each triangle.



47. **Business** A small juice company spends \$1200 per day on business expenses plus \$1.10 per bottle of juice they make. They charge \$2.50 for each bottle of juice they produce. How many bottles of juice must the company sell in one day in order to equal its daily costs?

48. **Spreadsheet** You set up a spreadsheet to solve $7(x + 1) = 3(x - 1)$.
- Does your spreadsheet show the solution of the equation?
 - Between which two values of x is the solution of the equation? How do you know?
 - For what spreadsheet values of x is $7(x + 1)$ less than $3(x - 1)$?

	A	B	C
1	x	$7(x + 1)$	$3(x - 1)$
2	-5	-28	-18
3	-3	-14	-12
4	-1	0	-6
5	1	14	0
6	3	28	6