

Problem Pairs in Middle School

	A	B
1	<p>Solve for x:</p> $3x = 9$	<p>Solve for x:</p> $3x + 1 = 9$
2	What is the product of 12×13 ?	What is the product of $(x + 2)(x + 3)$?
3	Gerald can bike 6 miles in 3 hours. How many miles could he bike in 1 hour ?	Gerald can bike m miles in b hours. How many miles could he bike in 1 hour?
4	Monica is trying to wrap a present in the shape of a box. The box measures 3 inches by 4 inches by 5 inches. How much wrapping paper will she need?	Monica is trying to figure out how many 1 inch cubes she can fit in a box. The box measures 3 inches by 4 inches by 5 inches. How many 1 inch cubes will fit inside it?
5	<p>Randall shot many free throws after school on Monday. He made a lot of them! How many went in?</p> <p>What different kinds of information could help you figure out how many he made?</p>	<p>Randall shot 60 free throws after school on Monday. He made 75% of them! How many went in?</p>

6	A game controller sells for \$29.99 and is made of materials that cost \$1.19. A worker is paid \$8.50 per hour to make game controllers, and can assemble 5 per hour. Write an expression that shows how much profit the company makes from selling 10 game controllers.	A game controller sells for \$29.99 and is made of materials that cost \$1.19. A worker is paid \$8.50 per hour to make game controllers, and can assemble 5 per hour. Write an expression that shows how much money a worker earns from making 10 game controllers.
7	Melanie has 6 liters of lemonade. She is going to pour it into containers that can each hold 2 liters. How many containers will she need?	Melanie has 6 liters of lemonade. She is going to pour it into containers that can each hold 1/2 liter. How many containers will she need?
8	What is the product of 342×12 ?	What is the product of 3.42×1.2 ?
9	The population of trout in the lake has decreased by 20% since last year. If there were 1200 trout in the lake last year, how many are there this year?	The number of electric cars in town has increased by 20% since last year. If there were 1200 electric cars last year, how many are there this year?
10	<p>What do you notice about the result when these two equations are added together?</p> $\begin{array}{r} 3 + 2 = 5 \\ + \quad 4 + 5 = 9 \\ \hline 7 + 7 = 14 \end{array}$	<p>What do you think the result will be when these two equations are added together?</p> $\begin{array}{r} x + y = 3 \\ + \quad 2x + 3y = 7 \\ \hline \end{array}$