

Linear Equations Word Problems Worksheets

1. Marvin paid an entrance fee of \$5 plus an additional \$1.25 per game at a local arcade. Altogether, he spent \$26.25. Write and solve an equation to determine how many games Marvin played.

2. The sum of four consecutive integers is -26 . What are the integers?

3. A book has x pages. How many pages are in the book if Maria read 45 pages of a book on Monday, $\frac{1}{2}$ the book on Tuesday, and the remaining 72 pages on Wednesday

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1. Marvin paid an entrance fee of \$5 plus an additional \$1.25 per game at a local arcade. Altogether, he spent \$26.25. Write and solve an equation to determine how many games Marvin played.

Let x represent the number of games he played.

$$\begin{aligned}5 + 1.25x &= 26.25 \\1.25x &= 21.25 \\x &= \frac{21.25}{1.25} \\x &= 17\end{aligned}$$

Marvin played 17 games.

2. The sum of four consecutive integers is -26 . What are the integers?

Let x be the first integer.

$$\begin{aligned}x + (x + 1) + (x + 2) + (x + 3) &= -26 \\4x + 6 &= -26 \\4x &= -32 \\x &= -8\end{aligned}$$

The integers are -8 , -7 , -6 , and -5 .

3. A book has x pages. How many pages are in the book if Maria read 45 pages of a book on Monday, $\frac{1}{2}$ the book on Tuesday, and the remaining 72 pages on Wednesday

Let x be the number of pages in the book.

$$\begin{aligned}x &= 45 + \frac{1}{2}x + 72 \\x &= 117 + \frac{1}{2}x \\\frac{1}{2}x &= 117 \\x &= 234\end{aligned}$$

The book has 234 pages