

Problem-Solving Practice

Algebra: Write Expressions

OLYMPICS For Exercises 1–4, use the table that shows the number of medals won by each country in the 2008 Summer Olympics.

| 2008 Summer Olympic Medals | | | | | |
|----------------------------|--------|---------------|--------|-------------|--------|
| Country | Medals | Country | Medals | Country | Medals |
| USA | m | Great Britain | 47 | France | 40 |
| China | 100 | Australia | a | South Korea | 31 |
| Russia | 72 | Germany | 41 | Italy | i |

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| <p>1. Write an expression to show how many more medals the USA won than Germany. $m - 41$</p> | <p>2. Write an expression to show how many fewer medals Australia won than Great Britain. $47 - a$</p> |
| <p>3. Write an expression to show how many medals were won by the USA, Australia, and France combined. $m + a + 40$</p> | <p>4. The number of medals won by the United States is 26 more than three times the number of medals won by Italy. Write an algebraic expression to represent this statement. $3i + 26$</p> |
| <p>5. TRAVEL Mrs. Guang purchased four airline tickets to Florida. She will also pay a fee of \$55 for an extra piece of luggage. Define a variable and write an expression to represent her total cost of flying to Florida. Let t represent the cost of the ticket; $4t + 55$</p> | <p>6. MEASUREMENT There are about 1.6 kilometers in every mile. Write an expression to represent the approximate number of kilometers in m miles. Then use the expression to find the approximate number of kilometers in 5 miles. $1.6m$; 8 kilometers</p> |