## Another Look!

Darrell has 3 cousins. Robert has 42 cousins.
How many times as many cousins does Robert have as Darrell?

Let $n=$ the number of times as many.

42

$\uparrow$
Darrell's cousins
Write a multiplication equation to compare the numbers of cousins.

42 is $n$ times as many as 3 .
$42=n \times 3$
What number times 3 equals 42?

Since you know the original amount and the total, you need to divide to find how many times as many.

Write and solve a related division equation.

| division equation. 4 <br> If $42=n \times 3$, then $n=42 \div 3$. 10 <br> $n=14$  |  |
| :--- | ---: |
| $3 \longdiv { 4 2 }$ <br> Robert has 14 times as <br> many cousins as Darrell. | $\frac{-30}{12}$ |
|  | $\frac{-12}{0}$ |

For 1-4, write a comparison sentence and an equation. Find the value of the variable that makes the sentence true.

1. There are 51 families in Oakville who have a pool. That is 3 times as many families with a pool than in Elmburg. How many families in Elmburg, $n$, have a pool?
2. Marcy picked 3 times as many ounces of kale as Phil picked. Phil picked 42 ounces of kale. How many ounces of kale, $k$, did Marcy pick?
3. Gilbert walked 288 minutes. That is 4 times as many minutes as Eileen walked. How many minutes, $m$, did Eileen walk?
4. Jennifer feeds 5 times as many fish as Tony. Tony feeds 56 fish. How many fish, $f$, does Jennifer feed?
5. Algebra The yellow $T$-shirt costs how many times as much as the blue T-shirt? Draw a bar diagram and write and solve an equation.
6. Algebra Mason is 9 years old. His mother's age is 4 times Mason's age. How old is Mason's mother? Draw a bar diagram and write and solve an equation.

7. Reasoning Hilary walked 654 feet in 3 minutes. She says she walked 218 feet per minute. Is Hilary's answer reasonable? Explain.
8. Higher Order Thinking The value of $n$ is both 5 times as much as the value of $m$ and 36 more than the value of $m$. What are the values of $n$ and $m$ ? Explain.

## Assessment Practice

9. Debbie has 8 quarters and 24 pennies in her piggy bank. She has $n$ times as many pennies as quarters. Which equation can be used to find $n$ ? 4.0A.1.1
(A) $n=8 \times 24$
(B) $24=4+n$
(C) $24=n \div 8$
(D) $24=n \times 8$
10. Marcus sleeps 60 hours a week. This is 5 times as many hours as he plays chess. How many hours a week does Marcus play chess? (3) ${ }^{\text {4.0.1.1. }}$
(A) 11 hours
(B) 12 hours
(C) 13 hours
(D) 14 hours
