

Lesson 1 Problem-Solving Practice

Solve One-Step Addition and Subtraction Equations

ANIMALS For Exercises 1–4, use the table.

The average lifespans of several different types of animals are shown in the table.

Average Lifespans of Animals			
Animal	Lifespan (yr)	Animal	Lifespan (yr)
Black bear	18	Guinea pig	4
Dog	12	Puma	?
Giraffe	10	Tiger	16
Gray squirrel	10	Zebra	?

<p>1. The lifespan of a black bear is 3 years longer than the lifespan of a zebra. Write an addition equation that you could use to find the lifespan of a zebra.</p> <p><i>ZEBRA = z</i></p> $z + 3 = 18$	<p>2. Solve the equation you wrote in Exercise 1. What is the lifespan of a zebra?</p> $z + 3 = 18$ $\begin{array}{r} z + 3 = 18 \\ + -3 \quad + -3 \\ \hline z = 15 \end{array}$ <p><i>CHECK</i></p> $z + 3 = 18$ $15 + 3 = 18$ <p><i>😊</i></p>
<p>3. The lifespan of a guinea pig is 8 years shorter than the lifespan of a puma. Write a subtraction equation that you could use to find the lifespan of a puma.</p> <p><i>PUMA = P</i></p> $P - 8 = 4$	<p>4. Solve the equation you wrote in Exercise 3. What is the lifespan of a puma?</p> $P - 8 = 4$ $\begin{array}{r} P - 8 = 4 \\ + 8 \quad + 8 \\ \hline P = 12 \end{array}$ <p><i>CHECK</i></p> $P - 8 = 4$ $12 - 8 = 4$ <p><i>😊</i></p>
<p>5. TECHNOLOGY A survey of teens showed that teens in Pittsburgh aged 12–17 spend 15.8 hours per week online. Teens in Miami/Ft. Lauderdale spend 14.2 hours per week online. Write and solve an addition equation to find the difference in time spent online by teens in these cities. <i>DIFFERENCE = d</i></p> $14.2 + d = 15.8$ $\begin{array}{r} 14.2 + d = 15.8 \\ + -14.2 \quad + -14.2 \\ \hline d = 1.6 \end{array}$ <p><i>CHECK</i></p> $14.2 + 1.6 = 15.8$ <p><i>😊</i></p> <p><i>d = 1.6 HOURS PER WEEK</i></p>	<p>6. SPORTS Annika Sorenstam won the 2006 MasterCard Classic with a final score of 8 under par, or -8. Her scores for the first two of the three rounds were -5 and -1. What was Ms. Sorenstam's score for the third round? <i>THIRD ROUND = x</i></p> $-5 + -1 + x = -8$ $\begin{array}{r} -5 + -1 + x = -8 \\ -6 + x = -8 \\ + 6 \quad + 6 \\ \hline x = -2 \end{array}$ <p><i>CHECK</i></p> $-5 + -1 + -2 = -8$ <p><i>😊</i></p>