## Section 7.2 Focus Exercise Answers

1. Let $\mathrm{x}=$ the length
$\mathrm{x}-2=$ the width
Sentence: The length is 8 inches and the width is 6 inches.
2. Let $\mathrm{x}=$ the width
$2 \mathrm{x}-1=$ the length
Sentence: The length is 6 feet and the width is $3 \frac{1}{2}$ feet.
3. Let $\mathrm{x}=$ the length
$\frac{1}{2} x-1=$ the width
Sentence: The length is 12 yards and the width is 5 yards.
4. Let $\mathrm{x}=$ the longer leg
$\mathrm{x}-4=$ the smaller leg
Sentence: The longer leg is 10 feet and the smaller leg is 6 feet.
5. Let $x=$ the shorter leg
$2 x-6=$ the longer leg
Sentence: The shorter leg is 8 feet and the longer leg is 10 feet.
6. Let $x=$ the shorter leg
$2 x+2=$ the longer leg
$(2 \mathrm{x}+2)+1=$ the hypotenuse
Sentence: The shorter leg is 5 inches, the longer leg is 12 inches, and the hypotenuse is 13 inches.
7. Let $\mathrm{x}=$ the shorter leg
$3 x+4=$ the hypotenuse
$3 x+3=$ the longer leg
Sentence: The shorter leg is 7 feet, the longer leg is 24 feet, and the hypotenuse is 25 feet.
