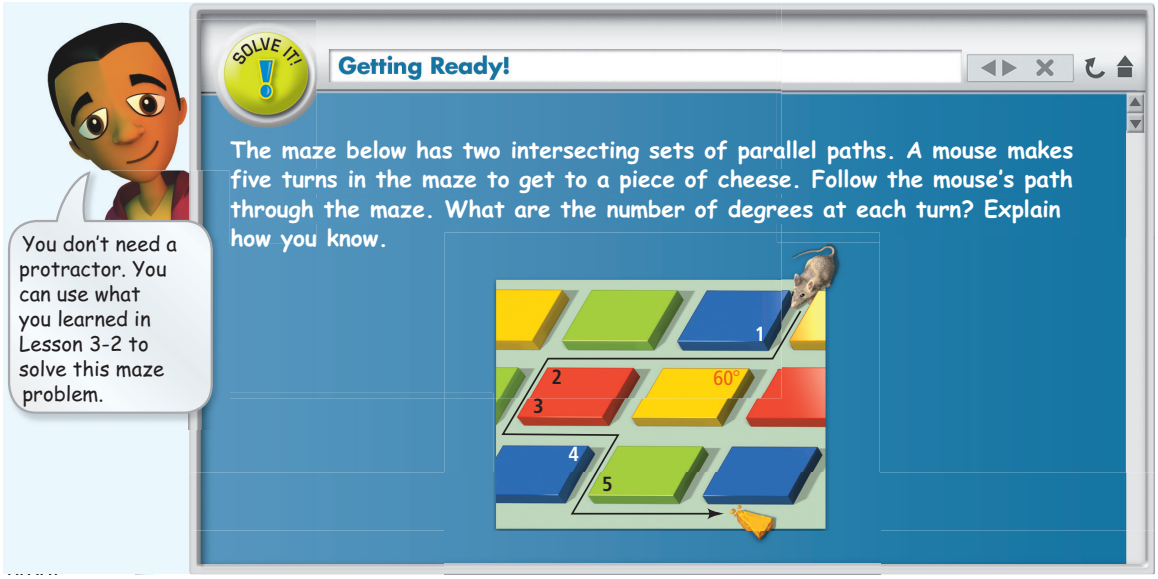
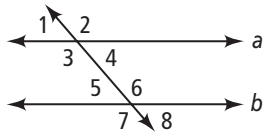
3-3 Solve It!



3-3 Lesson Quiz

Use the figure to answer each question.

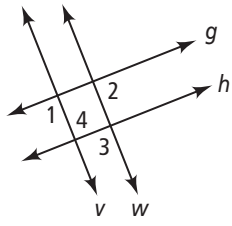


1. If $m\angle 1 = 42$, what must the measure of $\angle 7$ be in order to prove $a \parallel b$?

2. Do you UNDERSTAND? Suppose $m\angle 3 = 128$ and $m\angle 6 = (10x + 8)$. What value of x would result in $a \parallel b$?

3. Which theorem or postulate would you use in Exercise 2 to prove that $a \parallel b$?

Use the figure for Questions 4 and 5.



4. If $g \parallel h$ and $m\angle 2 = 88$, what is $m\angle 3$?

5. If $v \parallel w$ and $m\angle 1 = 120$, what is $m\angle 2$?

Answers

Solve It!

Turn 1: 120°, turn 2: 120°, turn 3: 60°, turn 4: 60°, turn 5: 60°; explanations may vary. Sample: When a transversal intersects two $\parallel$ lines, the $\measuredangle$s formed are $\cong$ or suppl. If you know the measure of one of those $\measuredangle$s, you can use the properties of $\parallel$ lines to find the measures of the other seven $\measuredangle$s.

Lesson Quiz

1. 138
2. 12
3. Converse of the Alternate Interior Angles Theorem
4. 92
5. 60