

# Problem-Solving Strategy: Use Models

Use the questions to help you solve.

1. Jacob is a starter on the basketball team. He has scored 12 or more points in half the games he's played. The coach thinks the team has a 75% chance of winning today's game. What is the probability that Jacob will score fewer than 12 points and the team will lose?

**UNDERSTAND**

What combination of events does the question ask about?

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What is the probability of each of those events occurring individually?

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**PLAN**

How can you use a model to simulate the problem?

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How many trials should you perform?

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**SOLVE**

How will you record your results?

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What is the experimental probability of the events occurring together?

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**LOOK BACK**

Is your model an accurate representation of the problem?

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2. The coach thinks the team has a 60% chance of winning next week's tournament if they win today's game. What is the chance that the team will win both today's game and the tournament?

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