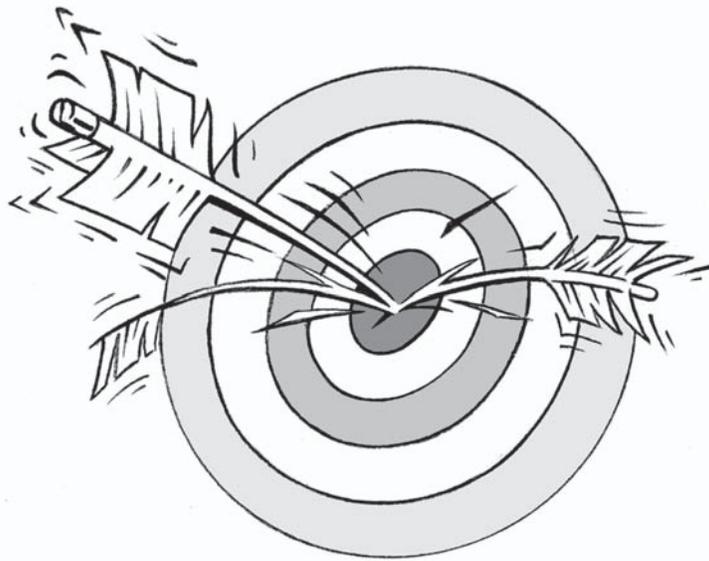


# TARGET



## GAME SUMMARY

Three rows of three cards are placed face up. Another card is turned face up to be the target number. The players take turns combining cards using addition, subtraction, multiplication, and division to make the target number. Once all possible combinations are removed from the face-up cards, the cards are replaced and partners continue to find *equations* that equal the target number.

**PLAYERS:** Grades 3–6, small groups of two, three, or four

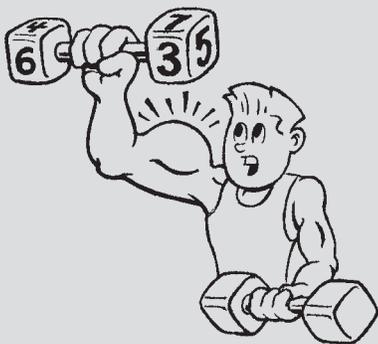
## YOU'LL NEED

**For each group of players:**

*IN KIDS' KIT*

- Deck of playing cards, with jacks, queens, and kings removed (ace equals one)

## MATH SKILLS



- ▶ Add, subtract, multiply, and divide mentally

### **About the math skills**

In this game, the children use addition, subtraction, multiplication, and division to make a target number. This helps them learn to think about numbers flexibly and do mental math.

## TIP

- ▶ Rather than telling a child who makes an error that he made a mistake, help him find his mistake by asking questions. For example, “You said that 6 times 5 is 25. How did you find that answer?”

## SOCIAL SKILLS

- ▶ Help without giving the answer
- ▶ Give others time to think before offering help

### **About the social skills**

Learning to give help, not the answer, is an important skill that benefits both the child needing help and the one giving it. The child giving the help deepens her understanding of the math by thinking of clues to support the other child. The child receiving the help has the opportunity to see the problem in a different way and still have the satisfaction of figuring out the answer herself.

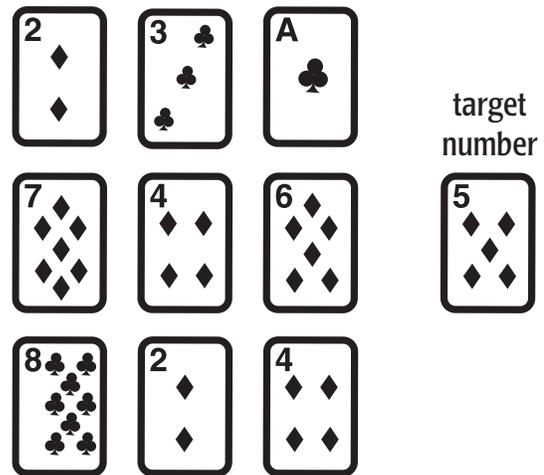
## GET READY

- 1** Read the game directions and pages 128–129, and play the game yourself before introducing it to the children.
- 2** Think about the math skills of the children to determine whether they are ready for multiplication and division or need more practice with addition and subtraction. Change the game accordingly.
- 3** If you are playing with more than four children, decide how you will divide them into groups of two to four to play the game.

# GAME DIRECTIONS

**GOAL:** To remove all the cards by finding combinations of cards that equal the target number

- 1 The players choose fairly who deals and who goes first, second, and so on.
- 2 The dealer places ten cards face up: three rows of three cards with one card on the side to be the target number. The target number stays the same for the entire game.
- 3 The first player removes cards that can be combined using multiplication, division, addition, and subtraction to equal the target number. (Ace equals one.) At least two cards must be removed at a time. (For example, if the target number is five, as in the illustration, there are several possible equations. A player could remove the two and three, because  $2 + 3 = 5$ ; the six and ace, because  $6 - 1 = 5$ ; or the two, three, two, and four, because two times three is six, plus four more is ten, divided by two equals five.)
- 4 When all possible combinations have been removed, the dealer fills the empty spaces and the next player finds equations for the target number.
- 5 The partners take turns until they have used all of the cards or all cards are dealt out and no more equations that equal the target number can be made.



# BEFORE THE GAME



- 1 Explain the game as you play it with a child as your partner.
- 2 If the children are ready, use examples of multiplication and division to encourage them to move beyond addition and subtraction. Also demonstrate giving help without giving the answer.

## TALK ABOUT

- Do you see a way you could combine some of the cards to equal the target number? What is another way? Is there a way we could make the target number using more cards?
- How could you use multiplication and/or division to equal the target number?
- How could you use these two cards to make the target number?
- How do I know when I should help my partner?

# DURING THE GAME



- 1 Help the children as they play.

## TALK ABOUT

- How did you use those cards to make the target number?
- How are you helping each other without giving the answer?

- 2 If a child is having difficulty seeing combinations, help by asking questions.

## TALK ABOUT

- How could you use these three cards to make the target number?
- How could you use division to make the target number? Multiplication? Addition? Subtraction?

- 3 If a player or group suggests a change in the rules while they are playing the game, allow them to discuss the change. Before changing the rule, make sure the change is fair to all players, everyone in the group agrees, and the math is still appropriate. (For example, if all nine cards have been dealt out and there are no ways to make the target number, a group might decide to either keep playing by adding another row of cards or start over.)

# AFTER THE GAME

Help the children think about the math and how they played together.

## TALK ABOUT

- What target numbers were the easiest to get? The hardest?
- How did it work to give help instead of just giving the answer?
- How did you know when to offer help?

## Changing the Game

- 1** To make the game less challenging:
  - Use ace to five from two decks of cards (40 cards).
  - Choose one “wild card” that can be used as any number.
- 2** To make the game more challenging:
  - Use a full deck of cards, including face cards. Make the jack equal eleven, the queen equal twelve, and the king equal thirteen.
- 3** Ask the children how to play the game differently and try their ideas.

