

Challenge

Division Dilemma

With a partner, play the Division Dilemma game. Create a 3–6 spinner and a 2–9 spinner. Player 1 spins the 3–6 spinner. Player 2 names a dividend with that number of digits. Then Player 1 spins the 2–9 spinner, which determines the divisor. The quotient is Player 1's score for the round. Player 2 then takes a turn.

Continue for 5 rounds. The player with more points wins.

1. What strategy did you use to give your partner a dividend?

2. Were there divisors that were easy for you to divide mentally? If so, which ones?

3. What is the greatest remainder that could occur in the game? Explain.

4. How would the game change if you spin the divisor spinner before the dividend spinner?

5. Play the game again but change the rules to get 1 point for each number that is in the remainder. How did the game change?

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Answers will vary.

2. Were there divisors that were easy for you to divide mentally? If so, which ones?

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3. What is the greatest remainder that could occur in the game? Explain.

8; the greatest remainder is 1 less than the largest divisor.

4. How would the game change if you spin the divisor spinner before the dividend spinner?

Possible answer: The person giving the dividend would always try to have quotients with remainders.

5. Play the game again but change the rules to get 1 point for each number that is in the remainder. How did the game change?

Possible answer: The person giving the dividend might try to avoid having quotients with remainders.
