

# Operation Target

**Building Fluency:** creating equations and the use of parentheses.

**Materials:** digit cards (0-9) and a recording sheet per player

**Number of Players:** 2

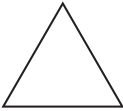
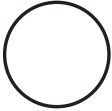
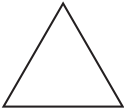
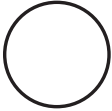
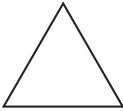
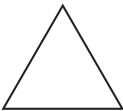
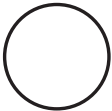
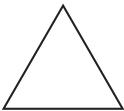
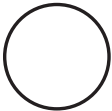
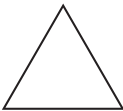
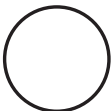
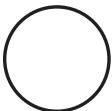
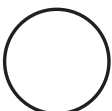
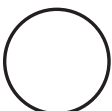
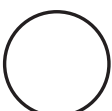
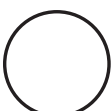
- Directions:**
1. The cards are shuffled and placed face down in a stack.
  2. The first player draws three cards.
  3. The player decides how to arrange the three numbers and which operations to use to achieve a score equal to or as close the “target number” as possible for Round One.
  4. The player then records the number sentence, using parentheses if necessary, in the space provided on their recording sheet
  5. The numbers are written in the triangles and the chosen operations in the circles.
  6. The player records the answer in the space provided and the difference in the “How Close?” column.
  7. The cards are discarded to one side. These are reshuffled and used again if needed.
  8. The other player has a turn.
  9. The player who is closer to the target at the end of a round is the winner. This is indicated with a check mark.
  10. If a round ends in a tie, both players record a win for that round.
  11. The player who wins the greater number of rounds is the overall winner.

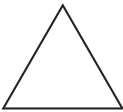
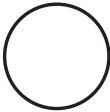
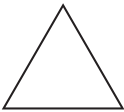
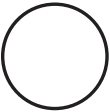
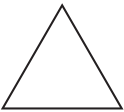
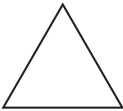
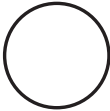
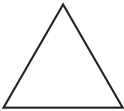
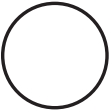
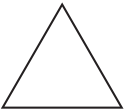
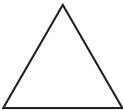
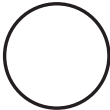
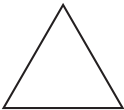
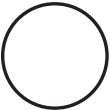
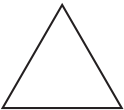
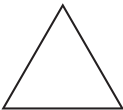
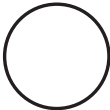
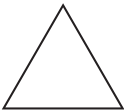
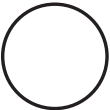
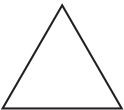
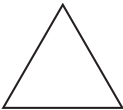
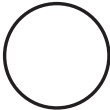
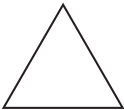
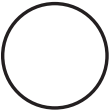
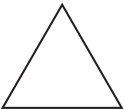
**Variation/Extension:** Students can use number tiles or dice (0-9). Students can make shorter or longer equations. Once students understand how this game works they can record the equation in their math notebook instead of using recording sheet.

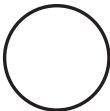
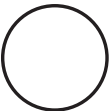
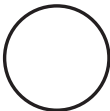
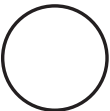
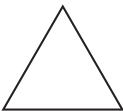
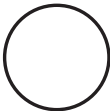
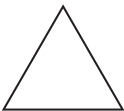
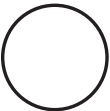
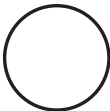
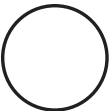
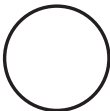
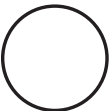
 = NUMBER

 = OPERATION

\* USE PARENTHESES IF NECESSARY

| Round | Number Sentence                                                                                                                                                                                                                                                                                                                                                                                                                             | Target | How Close? |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|
| 1     |      = _____ | 5      |            |
| 2     |      = _____ | 10     |            |
| 3     |      = _____ | 20     |            |
| 4     |      = _____ | 50     |            |
| 5     |      = _____ | 60     |            |

| Round | Number Sentence                                                                                                                                                                                                                                                                                                                                                                                                                   | Target | How Close? |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|
| 1     |      = _____ |        |            |
| 2     |      = _____ |        |            |
| 3     |      = _____ |        |            |
| 4     |      = _____ |        |            |
| 5     |      = _____ |        |            |

| Round | Number Sentence                                                                                                                                                                                                                                                                                                                                                                                                                             | Target | How Close? |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|
| 1     |      = _____ |        |            |
| 2     |      = _____ |        |            |
| 3     |      = _____ |        |            |
| 4     |      = _____ |        |            |
| 5     |      = _____ |        |            |

|          |          |          |          |
|----------|----------|----------|----------|
| 0        | 1        | 2        | 3        |
| 4        | 5        | <u>6</u> | 7        |
| 8        | <u>9</u> | 0        | 1        |
| 2        | 3        | 4        | 5        |
| <u>6</u> | 7        | 8        | <u>9</u> |
| 0        | 1        | 2        | 3        |
| 4        | 5        | <u>6</u> | 7        |
| 8        | <u>9</u> |          |          |

# Order Up

**Building Fluency:** compare decimals to thousands

**Materials:** recording sheet, digit cards (or 0-9 die)

**Number of Players:** 2-4

**Directions:**

1. The first player selects 6 digit cards and makes the largest possible six-digit number with those digits using a decimal.  
Example: cards show these digits: 6, 4, 3, 3, 2, 1, this order makes the largest possible number for those digits.
2. The player writes that number on line 1.
3. The second player selects 6 digit cards and makes the smallest possible number for those digits.
4. The player writes that number on line 10.
5. The next player selects 6 digit cards and must make a number that falls between the other two. They can choose any line to place that number on.
6. The next player selects 6 digit cards and makes a number using those digits that could be placed on an empty line between any two existing numbers.
7. Game continues until a number is correctly placed on each line. (All 10 lines contain a number and they are in the correct order), OR players cannot place a number correctly on any of the empty lines.

**Variation/Extension:** Once students understand the game they can create their own recording sheet in their math notebook. Teacher can modify this game by changing the number of digits or number of lines.

|    |  |
|----|--|
| 1  |  |
| 2  |  |
| 3  |  |
| 4  |  |
| 5  |  |
| 6  |  |
| 7  |  |
| 8  |  |
| 9  |  |
| 10 |  |

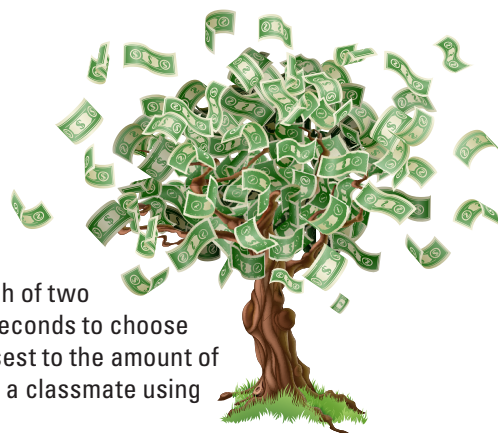
# Shopping Spree

### Building Fluency: adding and subtracting decimals

**Materials:** timer, recording sheet and price tag sheet

### Number of Players: 2

**Directions:** Karla likes to watch a game show called “Shopping Spree”. On the show, each of two contestants is given a certain amount of money to spend. Then each contestant has 30 seconds to choose from a list of prizes whose costs are given. The winner is the contestant who comes closest to the amount of money they are given to spend without going over. Play the game “Shopping Spree” with a classmate using the list of prizes and costs on the next page.



1. Decide who will be Contestant 1 and who will be Contestant 2.
2. As Contestant 1 chooses price tags, Contestant 2 records the choices. Example: Scooter \$5,535.89
3. Then switch places and let Contestant 2 choose while Contestant 1 records.
4. After both contestants have chosen their price tags, add the costs and determine who came the closest without going over.
5. Remember, you have 30 seconds to make your choices.

**Variation/Extension:** Change the amounts for the two contestants. Do you think the game could be unfair depending upon the amounts for the contestants to spend? Explain your thinking. Use the sales catalogs and create your own Shopping Spree.

[illegible]

Camera  
\$148.90

Car  
\$15,599.49

Stereo  
\$999.99

TV  
\$788.25

RV  
\$15,675.35

Scooter  
\$5,535.89

DVD  
\$357.45

Bike  
\$350.50

Microwave  
\$455.65

Bedroom Suite  
\$1,209.70

Cellphone  
\$217.25

Jewelry  
\$9,876.95

Vacation  
\$5,995.65

Refrigerator  
\$899.95

Boat  
\$10,785.50

# Multiplication Mix-up

**Building Fluency:** multiply multi-digit whole numbers

**Materials:** deck of cards, calculator

**Number of Players:** 2

**Directions:**

1. Remove the face cards from a deck of playing cards. The ace represents one and all other cards carry their numerical values.
2. Deal each player three cards.
3. Each player must use two of the cards to make a two digit number.
4. The third card will be the multiplier.  
Example, if a player draws a 1, 5, and 8, he could use the 1 and the 5 to make the two digit number 51 and multiply by 8 for a total of 408.
5. The player with the largest product gets the cards.



**Variation/Extension:** Students may want to create their own recording table in their math notebook to record their equations showing the standard algorithm or strategy used to solve the equation. Students may also want to use a calculator to check their work.

# Double Dutch Treat

**Building Fluency:** add and divide whole numbers

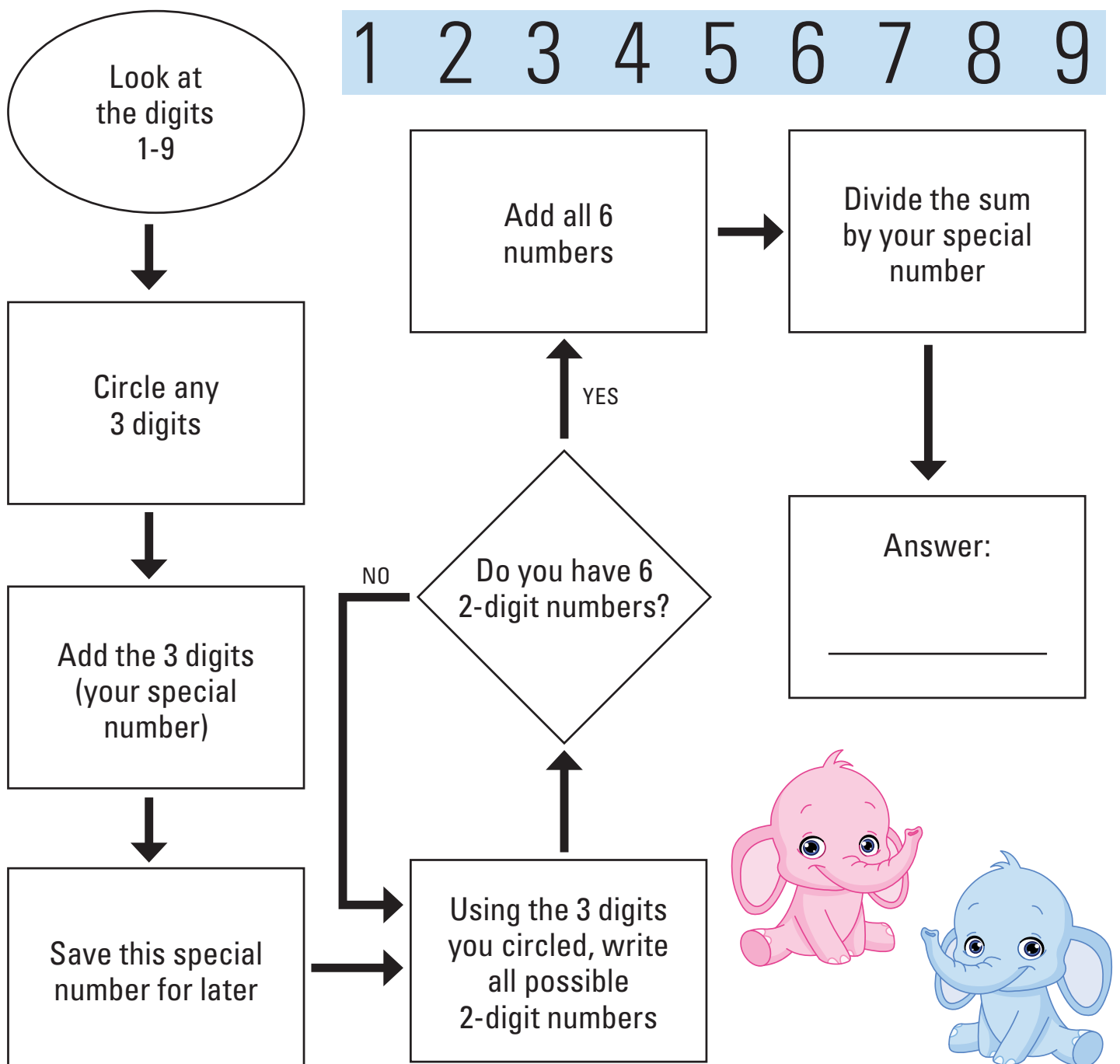
**Materials:** game board

**Number of Players:** 2

**Directions:**

1. Follow the steps laid out on the game board.
2. What do you notice?

**Variation/Extension:** Students may want to record their work in their math notebook. Students create their own version of this game, result ending with an even number or odd numbers etc...



# Decimal Dynamo



**Building Fluency:** adding and multiplying decimals

**Materials:** 4 dice and recording sheet, calculator

**Number of Players:** 2

**Directions:**

- 1. Roll 4 die (or one die 4 times). Use these numbers to create a 2-digit number and a whole number with a decimal.  
Example: 

|   |   |   |   |
|---|---|---|---|
| 6 | 4 | 2 | 5 |
|---|---|---|---|

    62 and 5.4    or    46 and 2.5
- 2. Record the numbers you create for each round.
- 3. Multiply these numbers and record the product for each round on the next line – gray space.
- 4. At the end of 6 rounds, add the products. The winner is the player with the smallest sum of the 6 products.

**Variation/Extension:** The winner with the greatest sum. Students may need to use a calculator to check their work.

**PLAYER 1**

|                             |  |
|-----------------------------|--|
| _____ <b>X</b> _____        |  |
| Round 1 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 2 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 3 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 4 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 5 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 6 Product →           |  |
| TOTAL OF ALL PRODUCTS _____ |  |

**PLAYER 2**

|                             |  |
|-----------------------------|--|
| _____ <b>X</b> _____        |  |
| Round 1 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 2 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 3 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 4 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 5 Product →           |  |
| _____ <b>X</b> _____        |  |
| Round 6 Product →           |  |
| TOTAL OF ALL PRODUCTS _____ |  |