

Angle Add-Up

- Materials**
- number cards 1–8 (4 of each)
 - number cards 0 and 9 (1 of each)
 - 1 straightedge
 - 1 *Angle Add-Up* Record Sheet for each player (*Math Masters*, p. G47)

Players 2

Skill Drawing angles; finding the measures of unknown angles

Object of the Game To score more points in 3 rounds.

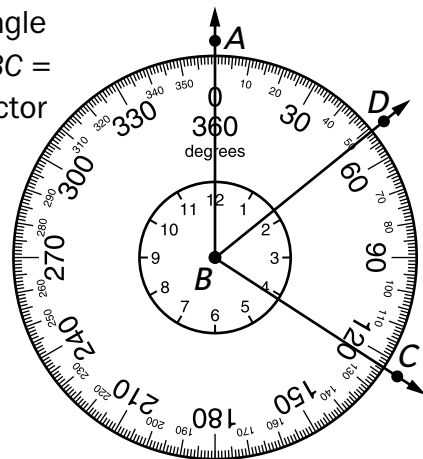
Directions

- 1 Shuffle the cards and place the deck number-side down on the table.
- 2 Each round, each player draws the number of cards indicated on the record sheet.
- 3 Each player uses the number cards to fill in the blanks and form angle measures so the unknown angle measure is as large as possible.
- 4 Players add or subtract to find the measure of the unknown angle and record it in the circle on their record sheet. The measure of the unknown angle is the player's score for the round.
- 5 Each player uses a straightedge, pencil, and the full-circle protractor on the record sheet to show that the angle measure of the whole is the sum of the angle measures of the parts.
- 6 Play 3 rounds for a game. The player with the greater total number of points at the end of 3 rounds wins the game.

Example

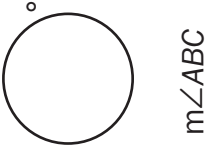
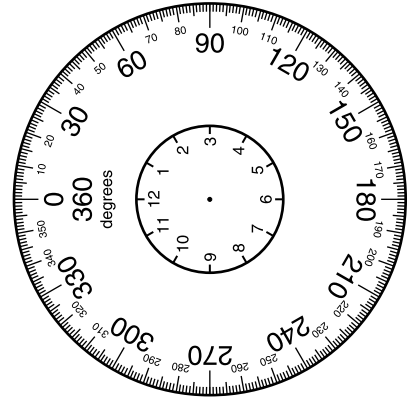
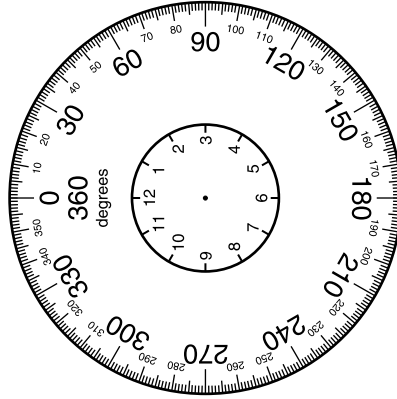
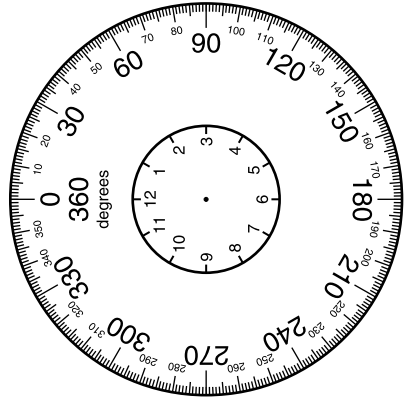
In Round 1, Suma draws a 2, 7, 1, and 5. She creates the angle measures 51° and 72° , then finds the sum: $m\angle ABD + m\angle DBC = m\angle ABC$. She shows the sum $51^\circ + 72^\circ = 123^\circ$ on her protractor and scores 123 points for the round.

Round 1:
Draw 4 cards. $\underbrace{5 \quad 1}_{m\angle ABD}^\circ + \underbrace{7 \quad 2}_{m\angle DBC}^\circ = \underbrace{123}_{m\angle ABC}^\circ$



Angle Add-Up Record Sheet

NAME		DATE	TIME
		SRB 248	1 2 4 3

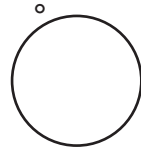


$$\text{---}^\circ + \text{---}^\circ = \text{---}^\circ$$

$m\angle ABD$ $m\angle DBC$ $m\angle ABC$

Round 1:

Draw 4 cards.

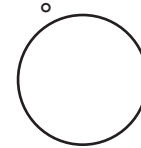


$$\text{---}^\circ + \text{---}^\circ = 90^\circ$$

$m\angle ABD$ $m\angle DBC$ $m\angle ABC$

Round 2:

Draw 2 cards.



$$\text{---}^\circ + \text{---}^\circ = 180^\circ$$

$m\angle ABD$ $m\angle DBC$ $m\angle ABC$

Round 3:

Draw 2 cards.

Total points = _____