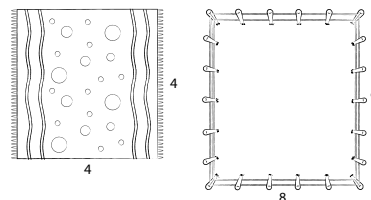


Rugs and Fences

- Materials**
- 1 set of *Rugs and Fences* Cards (*Math Masters*, p. G11)
 - 1 set of *Rugs and Fences* Rectangle Cards (*Math Masters*, pp. G12–G13)
 - 1 *Rugs and Fences* Record Sheet for each player (*Math Masters*, p. G14)
- Players** 2
- Skill** Finding the area and perimeter of rectangles by applying formulas
- Object of the Game** To score more points.

Directions

- 1 Shuffle the *Rugs and Fences* Rectangle Cards and place them picture-side down.
- 2 Shuffle the *Rugs and Fences* Cards and place them writing-side down next to the Rectangle Cards.
- 3 Players take turns. When it is your turn, draw one card from each deck and place the cards faceup on the table.
 - If you draw an area (*A*) card, find the area.
 - If you draw a perimeter (*P*) card, find the perimeter.
 - If you draw a “Player’s Choice” card, *you* may choose to find either the area or the perimeter using a formula.
 - If a “Partner’s Choice” card is drawn, your *partner* chooses whether you will find the area or the perimeter of the rectangle.
- 4 During your turn, record the rectangle’s length and width and circle *A* (area) or *P* (perimeter) on your record sheet. Then write a number sentence to show how you used a formula to find the area or perimeter. The answer is your score for the round.
- 5 The player with the higher total score at the end of 6 rounds is the winner.



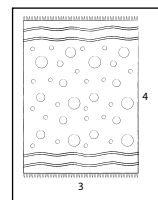
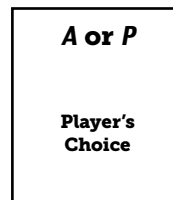
Example

Jonah draws the cards at the right. He may choose to calculate the area or the perimeter. Before he answers, Jonah figures out both the area and perimeter in his head.

$$\text{Area} = 3 * 4 = 12 \text{ square units}$$

and

$$\text{Perimeter} = 14 \text{ units}$$



Jonah records the length and width, and circles *P* on his record sheet. He writes the number model $2 * (3 + 4) = 14$, and earns 14 points.

Rugs and Fences Cards



NAME

DATE

TIME



A Find the area.	A Find the area.	A Find the area.	A Find the area.
P Find the perimeter.	P Find the perimeter.	P Find the perimeter.	P Find the perimeter.
A or P Partner's Choice	A or P Partner's Choice	A or P Partner's Choice	A or P Partner's Choice
A or P Player's Choice	A or P Player's Choice	A or P Player's Choice	A or P Player's Choice

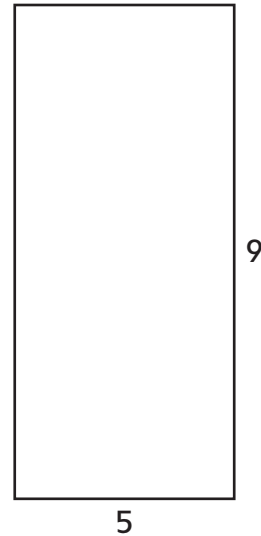
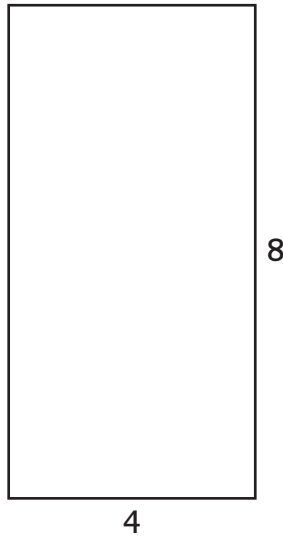
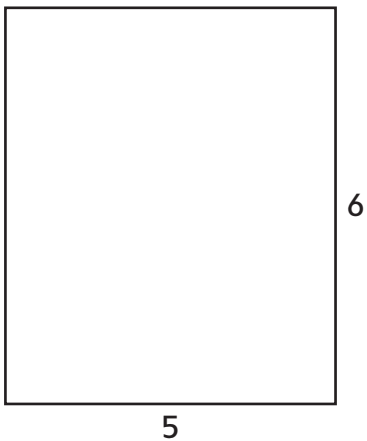
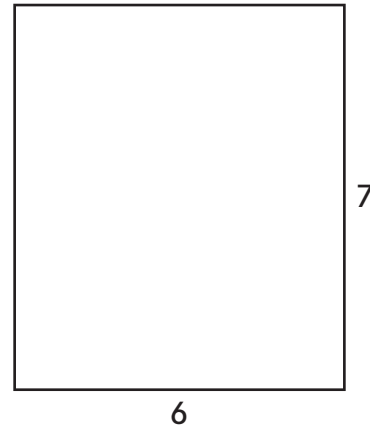
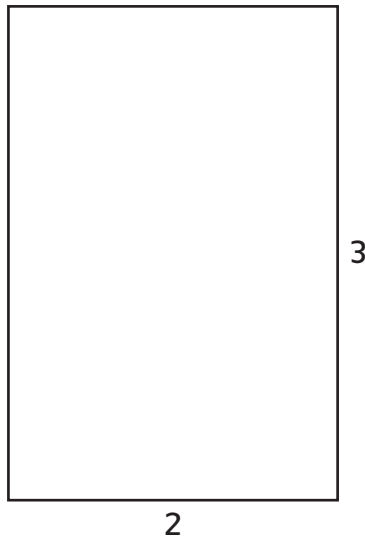
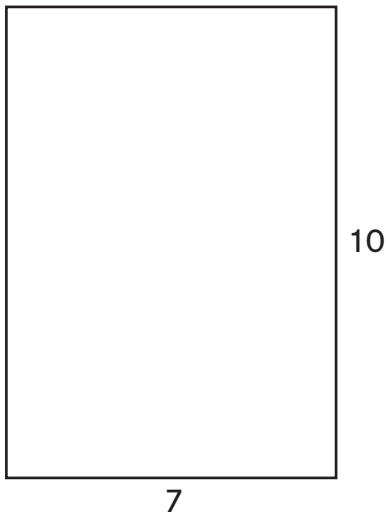
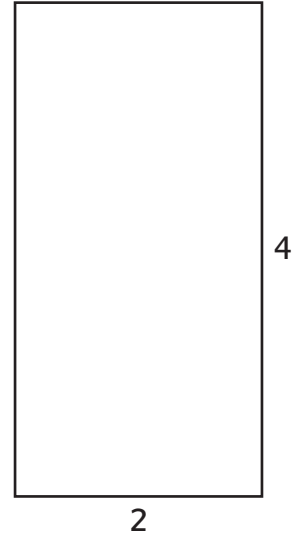
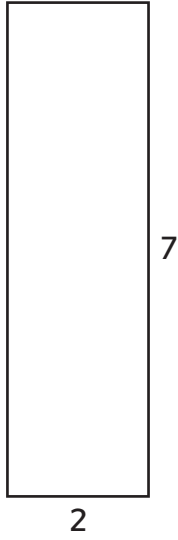
Rugs and Fences Rectangle Cards



NAME

DATE

TIME



Rugs and Fences

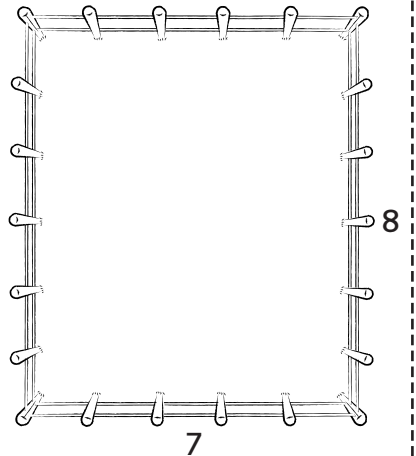
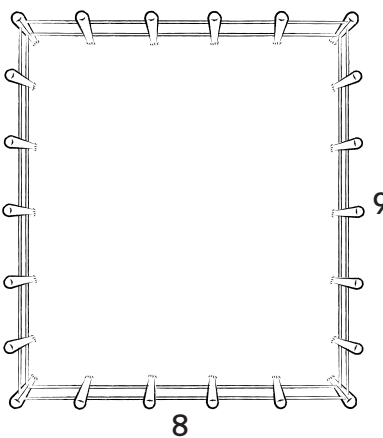
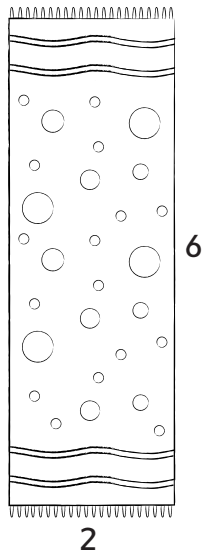
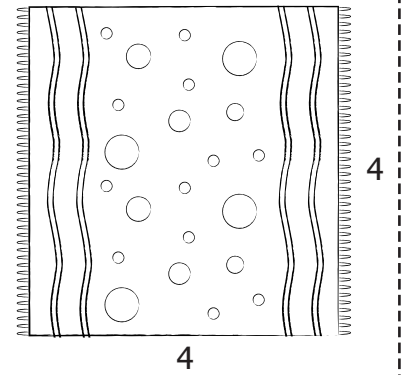
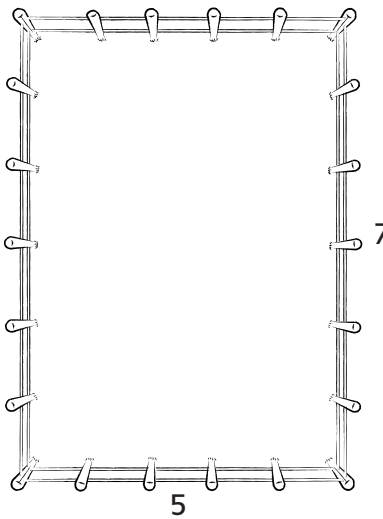
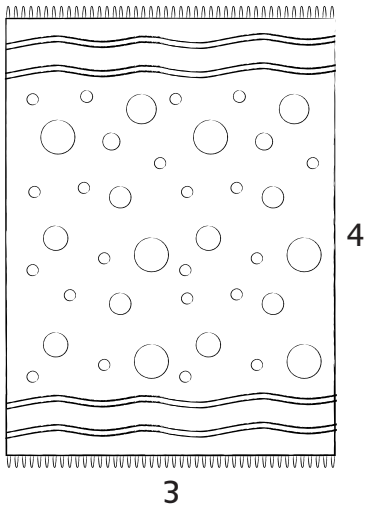
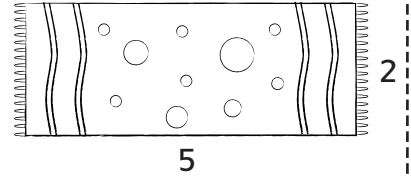
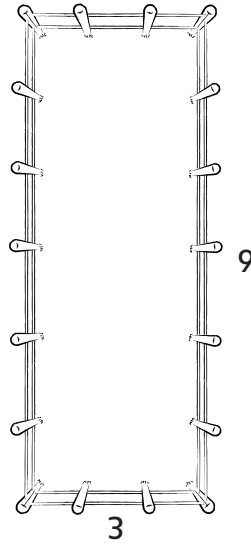
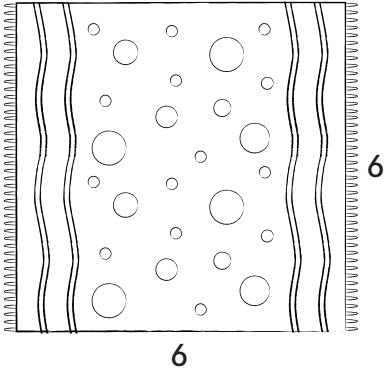
Rectangle Cards (continued)

1	2
4	3

NAME _____

DATE _____

TIME _____



Rugs and Fences Record Sheet



NAME

DATE

TIME

Perimeter formulas: $p = l + l + w + w$ $p = (2 * l) + (2 * w)$ $p = 2 * (l + w)$

Area formula: $A = l * w$



Round	Length	Width	Circle A (area) or p (perimeter)	Equation	Score
Example	2	4	A or p	$2 + 2 + 4 + 4 = 12$	12
1			A or p		
2			A or p		
3			A or p		
4			A or p		
5			A or p		
				Total Score	



Rugs and Fences Record Sheet



NAME

DATE

TIME

Perimeter formulas: $p = l + l + w + w$ $p = (2 * l) + (2 * w)$ $p = 2 * (l + w)$

Area formula: $A = l * w$



Round	Length	Width	Circle A (area) or p (perimeter)	Equation	Score
Example	2	4	A or p	$2 + 2 + 4 + 4 = 12$	12
1			A or p		
2			A or p		
3			A or p		
4			A or p		
5			A or p		
				Total Score	