

PROJECT CRITERIA

ROSS MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 300 square feet.
2. There must be seating for at least 27 students.

PROJECT BUDGET:
\$1,200

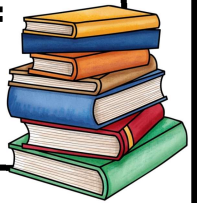


KLEIN MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 230 square feet.
2. There must be seating for at least 25 students.

PROJECT BUDGET:
\$950

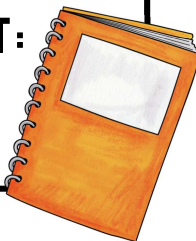


POLK MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 375 square feet.
2. There must be seating for at least 30 students.

PROJECT BUDGET:
\$1,400



KNOX MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 315 square feet.
2. There must be seating for at least 24 students.

PROJECT BUDGET:
\$1,300



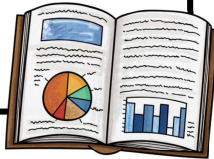
PROJECT CRITERIA

PINE MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 450 square feet.
2. There must be seating for at least 35 students.

PROJECT BUDGET:
\$1,700



WEST MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 160 square feet.
2. There must be seating for at least 23 students.

PROJECT BUDGET:
\$750



ALIN MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 515 square feet.
2. There must be seating for at least 26 students.

PROJECT BUDGET:
\$1,900



RICE MIDDLE SCHOOL

CRITERIA:

1. The shade tarp needs to cover an area of at least 305 square feet.
2. There must be seating for at least 22 students.

PROJECT BUDGET:
\$1,100



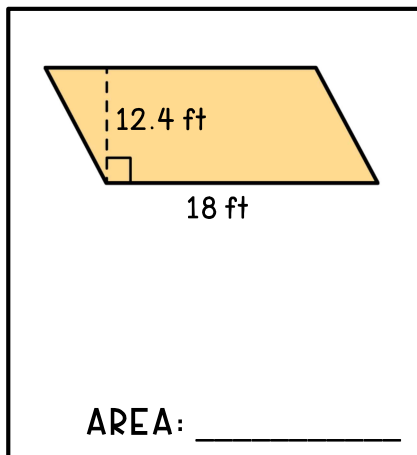
OUTDOOR EDUCATION

Your school PTO raised money to provide updates to your middle school's outdoor classroom. The money will go towards buying a shade tarp for the space and new seating for students. Use your project budget and criteria to design a plan for the updates of the outdoor classroom.

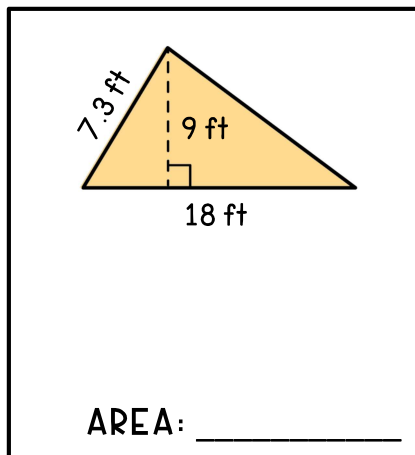
BUDGET	CRITERIA
	1.
	2.

Your school will order a shade tarp from Made in the Shade. The company offers three tarp options as shown below. Find the area of each tarp option.

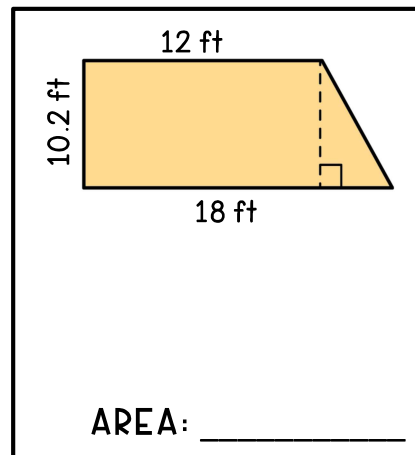
PARALLELOGRAM TARP



TRIANGLE TARP



TRAPEZOID TARP



Two or more tarps can be fastened together to create a custom tarp design. Determine the combination of tarp options that will meet the needs of your outdoor classroom. Describe your design and calculate the total area that it will cover.

Made in the Shade uses a waterproof material for the tarp and charges \$3 per square foot. Determine the total cost of the shade tarp you designed and the amount remaining in your budget.

TOTAL AREA OF SHADE TARP: _____

COST OF SHADE TARP: _____

AMOUNT REMAINING IN BUDGET: _____

OUTDOOR EDUCATION

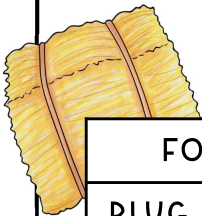
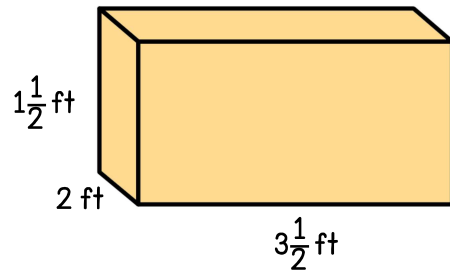
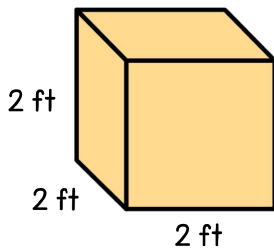


The PTO will purchase hay bales to serve as seating for students in the outdoor classroom. List the amount of seating your school needs and the amount of money you have remaining in your budget.

AMOUNT OF SEATING: _____

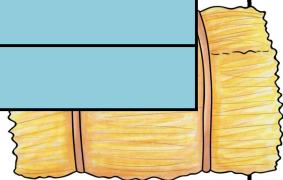
AMOUNT REMAINING IN BUDGET: _____

Hay bales are available to purchase as either a cube or rectangular prism with the dimensions shown below. The cube provides seating for one student and the rectangular prism provides seating for two students. Find the volume of each hay bale.



	CUBE
FORMULA	
PLUG IN VALUES	
VOLUME	

	RECTANGULAR PRISM
FORMULA	
PLUG IN VALUES	
VOLUME	



The price of hay is \$1.50 per cubic foot. Use your school's seating requirements and budget to help you choose the quantity of each type of hay bale you will order. Complete the table below with your selections.

HAY BALE STYLE	COST PER HAY BALE	QUANTITY ORDERED	TOTAL COST
CUBE			
RECTANGULAR PRISM			
TOTAL COST OF SEATING			

Including the shade tarp and the seating, record the total cost of your project plans below and how far under or over budget you are.

TOTAL PROJECT COST: _____

OVER/UNDER BUDGET: _____

Reflect on your problem-solving process. List any ways you could have saved more on the project or anything you would change if you were to design it again.