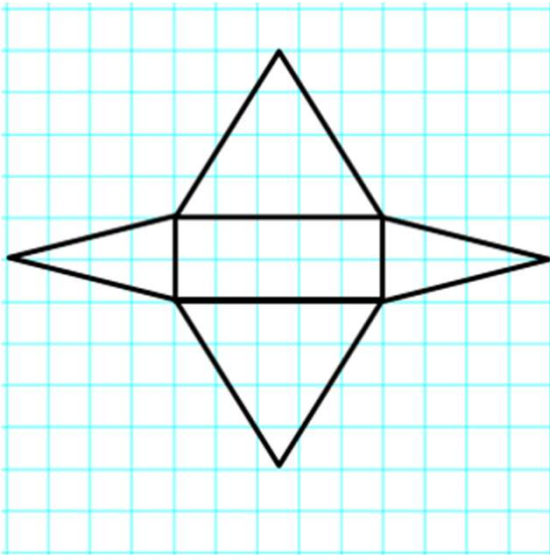
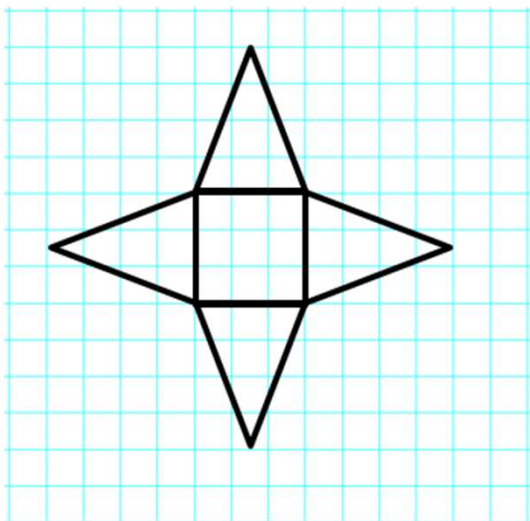


## Geometry Worksheets (Surface Area using Nets)

1. Name the shape, and write an expression for surface area. Calculate the surface area of the figure. Assume each box on the grid paper represents a  $1 \text{ ft.} \times 1 \text{ ft.}$  square.



2. Explain the error in the problem below. Assume each box on the grid paper represents a  $1 \text{ m} \times 1 \text{ m}$  square.



Name of Shape: Rectangular Pyramid, but more specifically a Square Pyramid

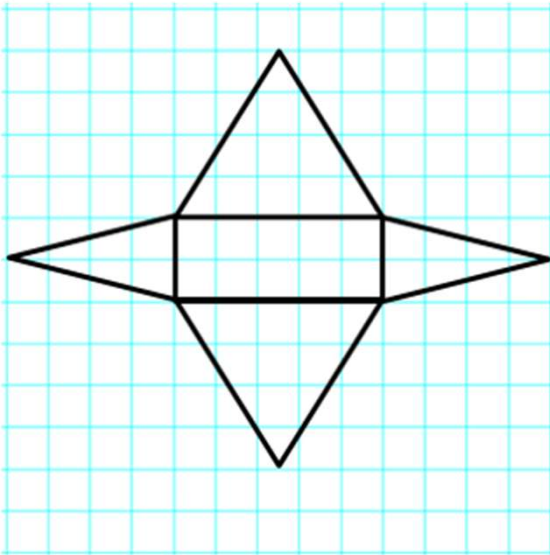
$$\text{Area of Base: } 3 \text{ m} \times 3 \text{ m} = 9 \text{ m}^2$$

$$\text{Area of Triangles: } 3 \text{ m} \times 4 \text{ m} = 12 \text{ m}^2$$

$$\text{Surface Area: } 9 \text{ m}^2 + 12 \text{ m}^2 + 12 \text{ m}^2 + 12 \text{ m}^2 + 12 \text{ m}^2 = 57 \text{ m}^2$$

## Geometry Worksheets (Surface Area using Nets)

1. Name the shape, and write an expression for surface area. Calculate the surface area of the figure. Assume each box on the grid paper represents a  $1 \text{ ft.} \times 1 \text{ ft.}$  square.

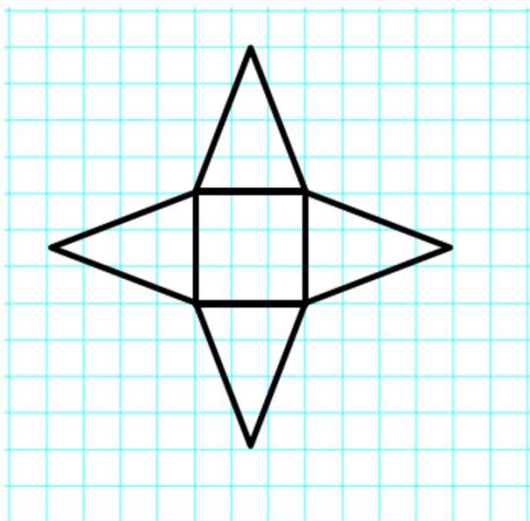


*Name of Shape: Rectangular Pyramid*

*Surface Area:  $(2 \text{ ft.} \times 5 \text{ ft.}) +$   
 $(\frac{1}{2} \times 2 \text{ ft.} \times 4 \text{ ft.}) + (\frac{1}{2} \times$   
 $2 \text{ ft.} \times 4 \text{ ft.}) + (\frac{1}{2} \times 5 \text{ ft.} \times$   
 $4 \text{ ft.}) + (\frac{1}{2} \times 5 \text{ ft.} \times 4 \text{ ft.})$*

*Work:  $2 \text{ ft.} \times 5 \text{ ft.} + 2(\frac{1}{2} \times 2 \text{ ft.} \times$   
 $4 \text{ ft.}) + 2(\frac{1}{2} \times 5 \text{ ft.} \times 4 \text{ ft.}) =$   
 $10 \text{ ft}^2 + 8 \text{ ft}^2 + 20 \text{ ft}^2 = 38 \text{ ft}^2$*

2. Explain the error in the problem below. Assume each box on the grid paper represents a  $1 \text{ m} \times 1 \text{ m}$  square.



*Name of Shape: Rectangular Pyramid, but more specifically a Square Pyramid*

*Area of Base:  $3 \text{ m} \times 3 \text{ m} = 9 \text{ m}^2$*

*Area of Triangles:  $3 \text{ m} \times 4 \text{ m} = 12 \text{ m}^2$*

*Surface Area:  $9 \text{ m}^2 + 12 \text{ m}^2 + 12 \text{ m}^2 +$   
 $12 \text{ m}^2 + 12 \text{ m}^2 = 57 \text{ m}^2$*

*The error in the solution is the area of the triangles. In order to calculate the correct area of the triangles, you must use the correct formula  $A = \frac{1}{2}bh$ . Therefore, the area of each triangle would be  $6 \text{ m}^2$  and not  $12 \text{ m}^2$ .*