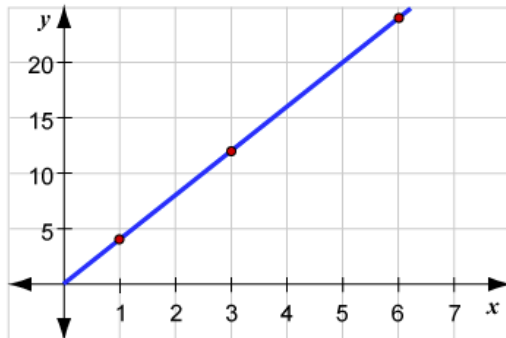


TOPIC 3: Patterns in Proportional Relationship – Block 2 Homework

1. The soccer team wants to order new shirts. Terri’s T-shirts makes T-shirts for \$7.50 per shirt. Find out more about the cost of t-shirts for the soccer team. Complete the table.

Number Ordered	Process	Cost in dollars
10	$\$7.50 \cdot 10$	
20		
	$\$7.50 \cdot 40$	
		\$187.50

2. What is the constant of proportionality, or unit rate, for the relationship represented by the graph?



$k =$ _____

3. Dylan puts equilateral triangles together and counts how many line segments are needed to draw each pattern.



Complete the table below to show the relationship between the number of triangles and the number of line segments.

Pattern Number	Number of Triangles	Number of Line Segments
1	1	3
2		
3		
4		
5		

4. Sue is painting wooden blocks. The table shows the relationship between the number of blocks, x , and the number of painted faces, y . What is the constant of proportionality?

Number of Blocks	Number of Painted Faces
2	8
6	24
10	40

$k = \underline{\hspace{2cm}}$