

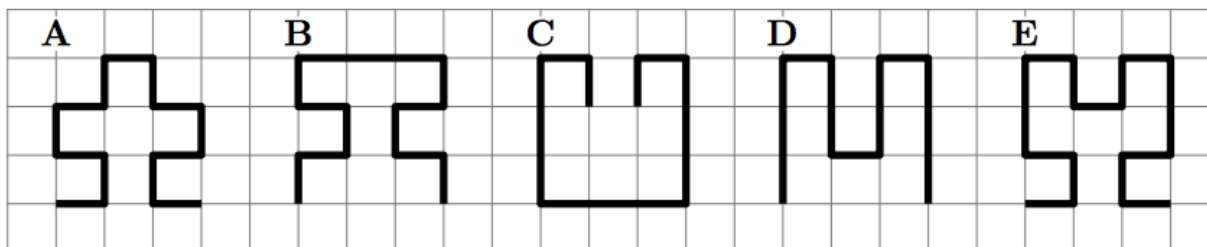
Math 2 Classwork 20

Warm Up

1

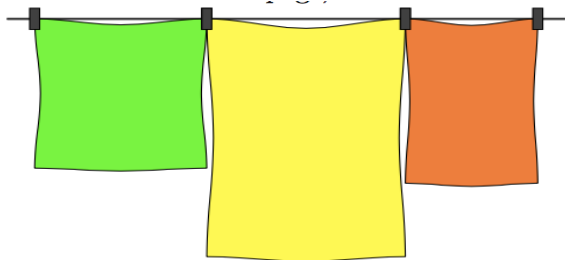
Which of the following lines is the longest?

- (A) A (B) B (C) C (D) D (E) E



2

Father hangs the laundry outside on a clothesline. He wants to use as few pegs as possible. For 3 towels he needs 4 pegs, as shown. How many pegs does he need for 9 towels?



- (A) 9 (B) 10 (C) 12 (D) 16 (E) 18

3

Grandmother made 11 cookies. She decorated 5 cookies with raisins and then 7 cookies with nuts. At least how many cookies were decorated with both raisins and nuts?

- (A) 1 (B) 2 (C) 5 (D) 7 (E) 12

New Material I

Translational Symmetry

Translational symmetry is when something has undergone a movement, a shift or a slide, in a specified direction through a specified distance without any rotation or reflection.

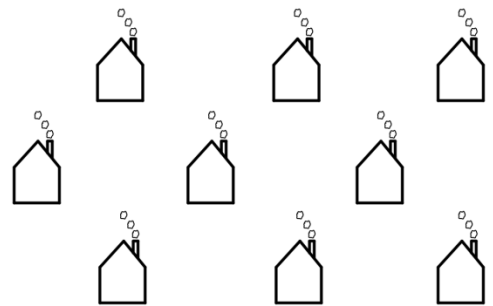
The distances between points within the figure will not change.

The angles within the figure will not change.

The size and shape of the figure will not change.

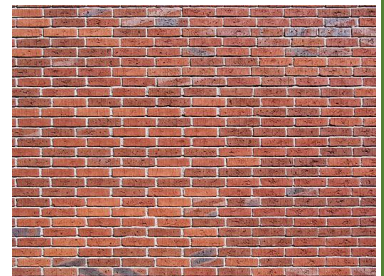
The only thing that changes is its location.

Example: The house in the most left of the middle row was translated up and right to create another house. It has been translated down and right to make another house. If we perform the same translation on each of new houses, the pattern will continue.



4

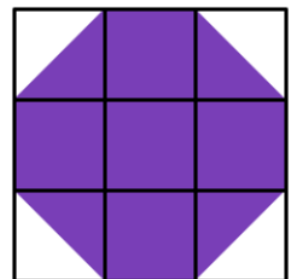
Find the examples of translational symmetry in the real life. A brick wall has translational symmetry in lots of directions.



REVIEW I

5

Find the order of rotational symmetry of the octagon on the picture.



6

How many lines of symmetry does a circle have?

- a) 1 b) 2 c) 3 d) 100 e) infinite

Pentominoes Symmetry

Draw the lines of symmetry	Draw the lines of symmetry
Order of rotation symmetry?	Order of rotation symmetry?
Draw the lines of symmetry	Draw the lines of symmetry
Order of rotation symmetry?	Order of rotation symmetry?
Draw the lines of symmetry	Draw the lines of symmetry
Order of rotation symmetry?	Order of rotation symmetry?

New Material II

Area and units of area

Perimeter measures the distance around the shape, to calculate a perimeter, we simply add the lengths of all sides of a polygon.

Area is a measure of how much surface is covered by a particular object or figure.

The square with a side of one unit is used as a unit of measure for area.

Every unit of **length** has a corresponding unit of area.

Thus, areas can be measured in square meters (m^2), square centimeters (cm^2), square millimeters (mm^2), square kilometers (km^2), square feet (ft^2), square yards (yd^2), square miles (mi^2), and so forth.

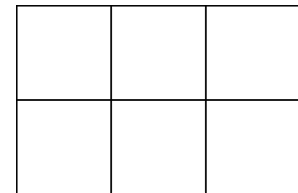
All the dimensions must be in the same units.

- 8** Two sheets of paper have twice the area of a single sheet, because there is twice as much space to write on.


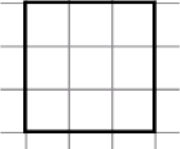
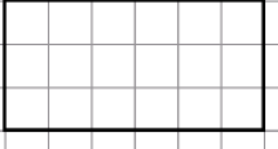
Different shapes have different ways to find the area. For example, in a rectangle we find the area by multiplying the length times the width. In the rectangle on the right, the area is 2×3 or 6. If you count the small squares you will find there are 6 of them.

a) $2 \times 3 = 6$

b) $3 \times 2 = 6$



- 9** Find the area of the rectangle:

<p>a. </p> <p>____ \times ____ = ____</p> <p>A = ____ square units.</p>	<p>b. </p> <p>____ \times ____ = ____</p> <p>A = ____ square units.</p>	<p>c. </p> <p>____ \times ____ = ____</p> <p>A = ____ square units.</p>
---	---	---

Homework Review

12

a) There were 10 passengers on a bus. At the first stop, 9 passengers got on the bus. At the second stop, 5 passengers got on the bus, and 3 passengers got off. How many people were on the bus after two stops, including the driver?

b) A taxi driver drove 3 kilometers from the airport to the bus station. Then he drove to the train station, which is 2 kilometers further away than the airport. Finally, he drove to the garage, which is 3 times further from the train station than the bus stop. How many kilometers did the taxi drive since it left the airport and arrived in the garage?

13

Try to figure out the pattern and find the missing number:

