

Put your name and school on each page – the exam is separated for grading, thank you.

Name: \_\_\_\_\_

#1

School: \_\_\_\_\_

Elementary 2019

1. In the 3 equations below, each of the shapes represent a number. Each shape represents the same number everywhere it occurs. What is the numerical value of the square?

$$\square - \bigcirc - \triangle = 24$$

$$\square \div \square \div \bigcirc = 20$$

$$\square \div \bigcirc + \triangle \div \triangle = 34$$

Name: \_\_\_\_\_

#2

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Elementary 2019

2. Given  $\triangle ABC$  whose vertices are  $A = (6, -4)$ ,  $B = (-5, 9)$ , and  $C = (16, 9)$ . Find the exact area of  $\triangle ABC$ .

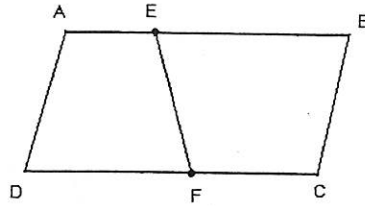
Name: \_\_\_\_\_

#3

School: \_\_\_\_\_

Elementary 2019

3. ABCD is a parallelogram such that AB is parallel to DC and DA is parallel to CB. The length of side AB is 20 cm. E is a point between A and B such that the length of AE is 3 cm. F is a point between points D and C. Find the length of DF such that the segment EF divides the parallelogram in two regions with equal areas.



Name: \_\_\_\_\_

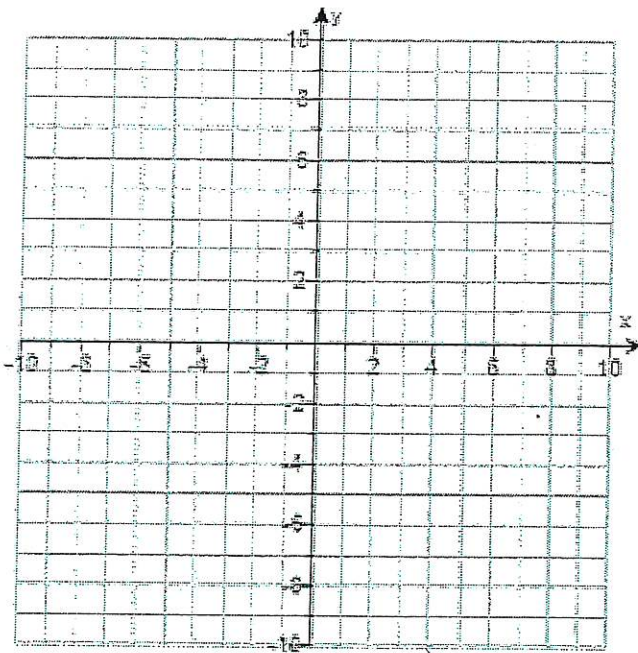
#4

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Elementary 2019

4. Sketch the graph (and label the vertices) of the solution set of system.

$$\begin{cases} x - y < 2 \\ x > -2 \\ y \leq 3 \end{cases}$$



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#5

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5. Based on the following pictures, how tall is the table?

