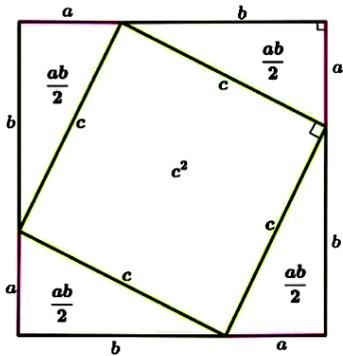


Геометрия. Блок №5. Теорема Пифагора

Теорема Пифагора

В прямоугольном треугольнике квадрат гипотенузы равен сумме квадратов катетов.



$$a^2 + b^2 = c^2$$

Доказательство:

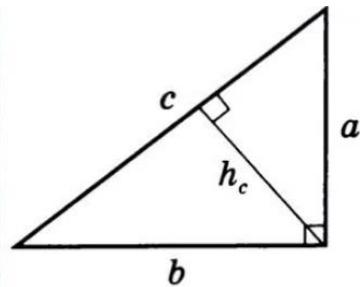
$$S = (a + b)^2 \quad S = c^2 + 4 \times 1/2ab$$

$$(a + b)^2 = c^2 + 4 \times 1/2ab$$

$$a^2 + 2ab + b^2 = c^2 + 2ab$$

$$a^2 + b^2 = c^2$$

Метод площадей в прямоугольном треугольнике

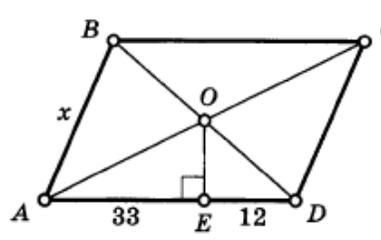
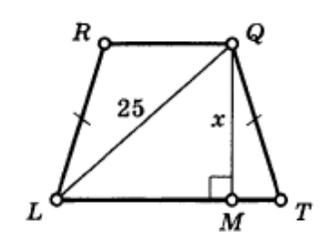
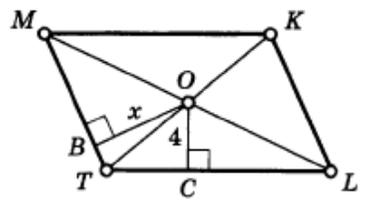
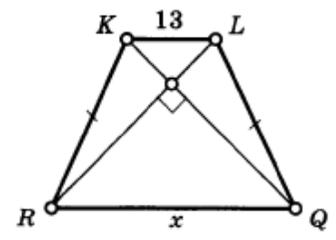
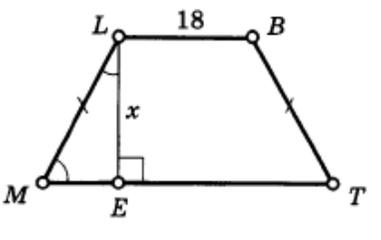
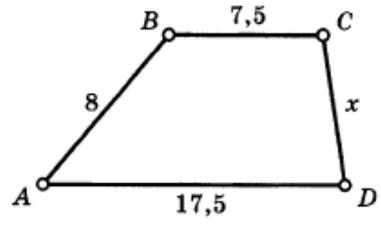
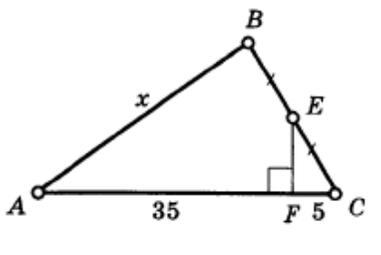
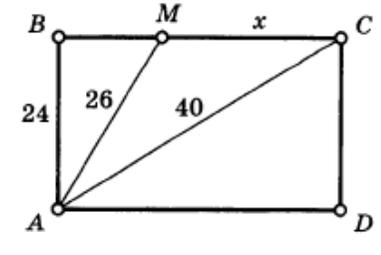


$$S = \frac{1}{2} ch_c$$

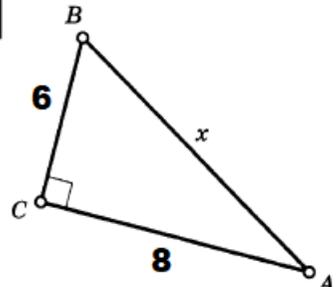
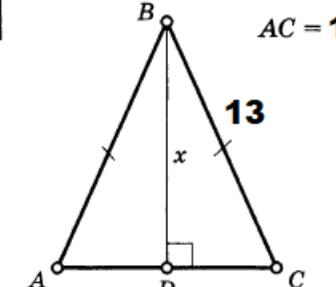
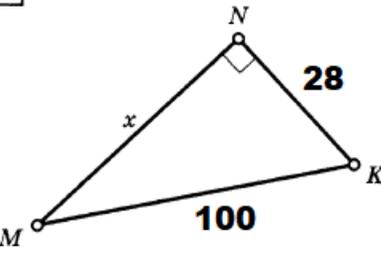
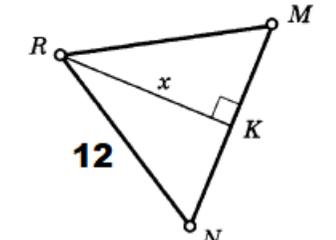
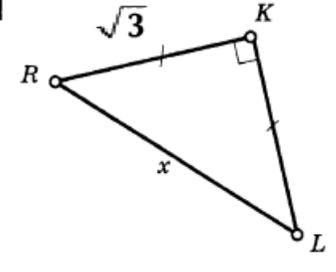
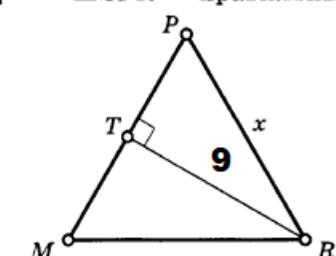
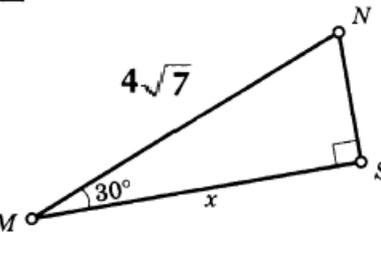
$$S = \frac{1}{2} ab$$

Задания для занятия. Найдите x

<p>1</p>	<p>5</p>
<p>2</p>	<p>6</p> <p>$\triangle RMN$ — правильный</p>
<p>3</p>	<p>7</p> <p>$\triangle MPR$ — правильный</p>
<p>4</p>	<p>8</p>

<p>9 $ABCD$ — параллелограмм $S = 900$</p> 	<p>13 $LRQT$ — трапеция $S_{LRQT} = 300$</p> 
<p>10 $MKLT$ — параллелограмм $S_{MKLT} = 48, P_{MKLT} = 40$</p> 	<p>14 $RKQL$ — трапеция $S = 100$</p> 
<p>11 $MLBT$ — трапеция $S = 243$</p> 	<p>15 $S_{ABCD} = 60, AD \parallel BC$</p> 
<p>12 $S_{\triangle ABC} = 320$</p> 	<p>16 $ABCD$ — прямоугольник</p> 

Домашнее задание. Найдите x

<p>1</p> 	<p>5 $AC = 10$</p> 
<p>2</p> 	<p>6 $\triangle RMN$ — правильный</p> 
<p>3</p> 	<p>7 $\triangle MPR$ — правильный</p> 
<p>4</p> 	<p>8</p> 