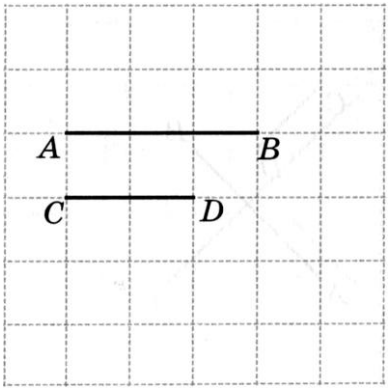
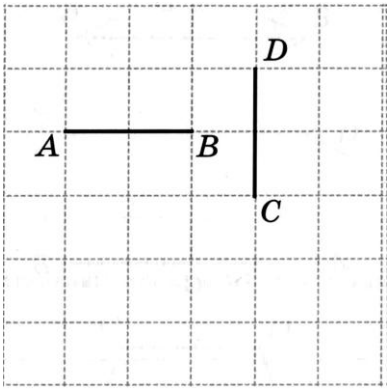
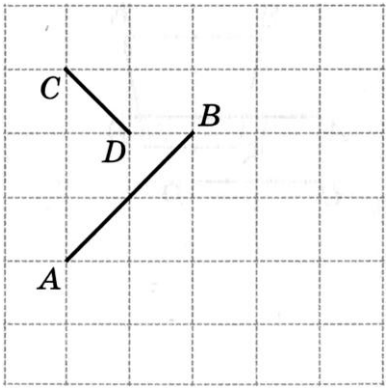
Math 4b. Homework 18.

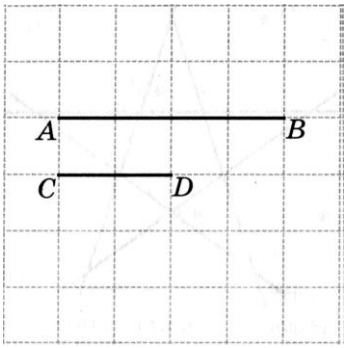
1. Draw a segment equal to the sum of segments AB and CD.

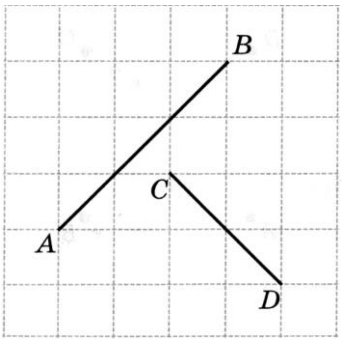






2. Draw a segment equal to the difference of segments AB and CD.





3. Which digits should be placed instead of the asterisks to make the problem correct?

$$\begin{array}{r} 45* \\ \times\ *** \\ \hline **3 \\ +***4 \\ \hline ****** \end{array}$$

4. A boat that has its own speed of 6 km/h traveled for 3 hours downstream and 5 hours upstream. What distance did the boat cover if the speed of the river current is 2 km/h?

5. Sole the problems:

a. A student thought of a number, multiplied it by 8, then multiplied the same number by 15, and added the results together. The sum was 276. What number did the student think of?
b. A student thought of a number, multiplied it by 16, then multiplied the same number by 9. The first product turned out to be 42 greater than the second. What number did the student think of?

6. It is known that $x + y = 10$. Find the values of the expressions:
$a.\ x + 6 + y;$ $b.\ (x + 12) + (y + 8);$ $c.\ (y + x) \cdot 4;$ $d.\ 5 \cdot x + 5 \cdot y;$

7. Evaluate:
$a.\ 2 \cdot 1\frac{5}{12} + 4 \cdot 1\frac{1}{8} + 1\frac{1}{9} \cdot 1\frac{1}{4};$ $b.\ \frac{70}{\frac{5}{8} + \frac{5}{6}} + \left(3\frac{1}{9} - \frac{1}{3}\right);$

$c.\ \left(\frac{1}{6} + \frac{1}{10} + \frac{1}{15}\right) : \left(\frac{3}{5} - \frac{1}{3} - \frac{1}{4}\right);$ $d.\ \left(3 - 1\frac{5}{8}\right) \cdot \left(4 - 1\frac{3}{11}\right) : \left(5 - 1\frac{1}{4}\right)$

Find the pattern and continue it for a few more steps (do it in your notebook using a ruler),