

Problems marked with * are more difficult.

1. Evaluate the following expressions (hint: try to use the most efficient way to do it, do some steps using decimals and other using normal fraction):

$$\left(\frac{(2.7 - 0.8) \cdot 2\frac{1}{3}}{(5.2 - 1.4) : \frac{3}{70}} + 0.125 \right) : 2\frac{1}{2} + 0.43$$

Answer is 0.5, but you need to show your solution.

2. Factorize the following expressions:

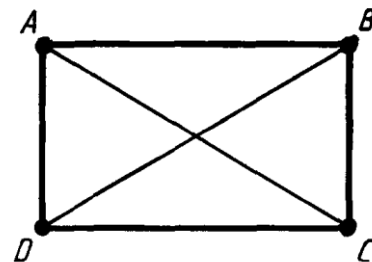
Example: $(a + b)a - b(a + b) = (a + b)(a - b)$

$$\begin{aligned} &x(a + b) + y(a + b); \\ &m(n - 3) + 2(n - 3); \\ &2a(1 - b) - 3(1 - b); \\ &7x(x + 2y) - 2(2y + x); \\ &2x(x + 2y) + 3y(x + 2y); \end{aligned}$$

3. Fill up the table (0,5 is 0.5):

x	1	3	0	-1	-5	0,5	$-\frac{1}{3}$
$x - 1$							
$x^2 - 1$							
$x^2 - 3x$							
$2x^2 - 3x + 7$							

4. Prove, that diagonals of a rectangle are equal.



5. *Construct an isosceles triangle with the angle at the base and altitude to the base equal to the following:

