

$$\begin{aligned} (1) & (\sqrt{225} - 3\sqrt{121}) : (2\sqrt{0,09} + 0,074 \cdot \sqrt{10000}) = \\ & = (15 - 3 \cdot 11) : (2 \cdot 0,3 + 0,074 \cdot 100) = \\ & = (15 - 33) : (0,6 + 7,4) = \\ & = -18 : 8 = -\frac{18}{8} = -\frac{9}{4} \end{aligned}$$

$$(2) |3x-6|=9$$

$$3x-6=9$$

$$3x=15$$

$$\underline{x=5}$$

$$-(3x-6)=9$$

$$-3x+6=9$$

$$-3x=3$$

$$\underline{x=-1}$$



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$$(4) x + \frac{3}{2} < 2x + \frac{1}{2} < \frac{3}{2}(x+2)$$

$$x + \frac{3}{2} < 2x + \frac{1}{2}$$

$$2x + \frac{1}{2} < \frac{3}{2}(x+2)$$

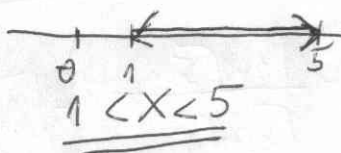
$$2x + 3 < 4x + 1$$

$$4x + 1 < 3x + 6$$

$$-2x < -2 \quad | : (-2)$$

$$\underline{x < 5}$$

$$\underline{x > 1}$$



$$(3) |2a-6| - (2a-4) = -2 \Leftrightarrow$$

$$|2a-6| = -2 + (2a-4) = 2a-6$$

$$\Leftrightarrow 2a-6 \geq 0 \Leftrightarrow \underline{a \geq 3}$$

$$(5) \frac{\sqrt{5}+\sqrt{7}}{\sqrt{5}-\sqrt{7}} - \frac{\sqrt{5}-\sqrt{7}}{\sqrt{5}+\sqrt{7}} + \sqrt{140} =$$

$$= \frac{(\sqrt{5}+\sqrt{7})^2 - (\sqrt{5}-\sqrt{7})^2}{5-7} + \sqrt{4 \cdot 35} =$$

$$= \frac{5+7+2\sqrt{35} - (5+7-2\sqrt{35})}{-2} + 2\sqrt{35} =$$

$$= \frac{+4\sqrt{35}}{-2} + 2\sqrt{35} = \underline{\underline{0}}$$

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$$(1) \sqrt{\frac{0,04}{0,01}} + \sqrt{\frac{144}{1}} : \sqrt{81 \cdot \frac{10}{25}} =$$

$$= \left(\sqrt{\frac{4}{1}} + \sqrt{\frac{144}{100}} \right) : \sqrt{\frac{81}{25}} =$$

$$= \left(2 + \frac{12}{10} \right) : \frac{9}{5} =$$

$$= \frac{32}{10} \cdot \frac{5}{9} = \frac{32}{18} = 1 \frac{14}{18} = \underline{\underline{1 \frac{7}{9}}}$$

$$(7) 1. \text{vzorec} : X$$

$$2. \text{II} - : X + 10\% \cdot X = 1,1X$$

$$3. \text{III} - : X + 30\% \cdot X = 1,3X$$

$$\text{slupaj} : 3,4X = 17 \cdot 10^4$$

$$X = \frac{17 \cdot 10^4}{3,4} = \frac{170}{3,4} \cdot 10^4 =$$

$$X = 5 \cdot 10^4 = \underline{\underline{50000}}$$

$$1. \text{vzorec} : X = \underline{\underline{50000}}$$

$$2. \text{II} - : X \cdot 1,1 = \underline{\underline{55000}}$$

$$3. \text{III} - : X \cdot 1,3 = \underline{\underline{65000}}$$