25.11.20. Домашна работа

142. $x, x+1, x+2, x+3$

$x+(x+1)+(x+2)+(x+3)=866$

$4x+6=866$

$4x=866-6$

$4x=860$

$x=860:4$

$x=215$

П: $215+216+217+218=866$ ✓

144. $x, x+1$

$(A \pm B)^2 = A^2 \pm 2AB + B^2$

$A^2 - B^2 = (A - B) \cdot (A + B)$

$(x+1)^2 - x^2 = 167$

$x^2 + 2 \cdot x \cdot 1 + 1^2 - x^2 = 167$

$2x + 1 = 167$

$2x = 167 - 1$

$2x = 166$

$x = 166 : 2$

$x = 83$

Π: $84^2 - 83^2 = (84-83) \cdot (84+83) = 1 \cdot 167 = 167$ ✓

25.11.20. Домашна работа

148. x – број страна

$$\frac{2}{5}\cdot x + 23 = \frac{x}{2} \quad /\cdot 10$$

$$\frac{\overset{2}{\cancel{10}}}{1}\cdot\frac{2x}{\underset{1}{\cancel{5}}} + 10\cdot 23 = \frac{\overset{5}{\cancel{10}}}{1}\cdot\frac{x}{\underset{1}{\cancel{2}}}$$

$$2\cdot 2x + 230 = 5x$$

$$4x + 230 = 5x$$

$$230 = 5x - 4x$$

$$x = 230$$

$$\text{П: } \frac{2}{\underset{1}{\cancel{5}}}\cdot\frac{\overset{46}{\cancel{230}}}{1} + 23 = 92 + 23 = 115 = \frac{230}{2}$$

149. X - тренутни број година

$(A \pm B)^2 = A^2 \pm 2AB + B^2$

$A^2 - B^2 = (A-B)(A+B)$

$X + 22 = 4 \cdot (X - 8)$

$X + 22 = 4X - 32$

$22 + 32 = 4X - X$

$54 = 3X$

$X = 54 : 3$

$X = 18$

Јован тренутно има 18 година.

П: $18 + 22 = 4 \cdot (18 - 8)$?

$40 = 4 \cdot 10$ ✓

25.11.20. Домаћа задаћа

158. $2k$ – паран број

$2k+1$ – непаран број

$\boxed{X = 2k}$

$2k,\ 2k+2,\ 2k+4$

$\frac{2k}{2} + (2k+2) + (2k+4) = 33$

$\frac{k}{2} + 4k + 6 = 33 \quad / \cdot 2$

$k + 8k + 12 = 66$

$9k + 12 = 66$

$9k = 66 - 12$

$9k = 54$

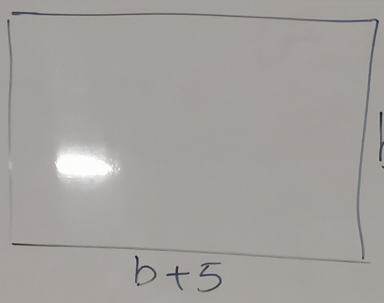
$k = 54 : 9 = 6$

$X = 2 \cdot k = 2 \cdot 6$

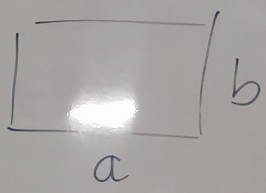
$\boxed{X = 12}$

Тражени бројеви су бројеви 12, 14 и 16.

181.



$P = a \cdot b$



$a = b + 5$

$b \cdot (\underbrace{b+5}_{a}) = (\underbrace{b+5}_{a}+3) \cdot (b-1)$

$b^2 + 5b = (b+8) \cdot (b-1)$

$b^2 + 5b = b^2 - b + 8b - 8$

$5b = 7b - 8$

$5b - 7b = -8$

$-2b = -8$

$b = -8 : (-2)$

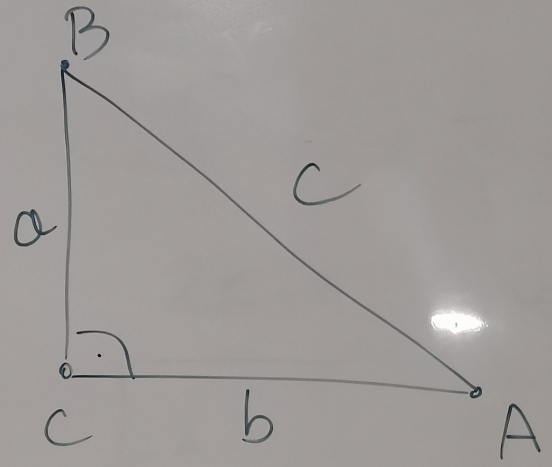
$b = 4$

$a = b + 5 = 9$

2, 14 и 16.

25.11.20 Домашна на

182.



$b = 5$

$a = c - 1$

$c = ?$

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

$c^2 = (c-1)^2 + 5^2$

$c^2 = c^2 - 2c + 1 + 25$

$2c = 26$

$c = 26 : 2$

$c = 13$

П: $5^2 + 12^2 = 13^2$

računa

212. δ) $(x-4)^2-(x+3)^2<3\cdot(x-9)$

$x^2-2\cdot x\cdot 4+4^2-(x^2+2\cdot x\cdot 3+3^2)<3x-27$

$x^2-8x+16-x^2-6x-9<3x-27$

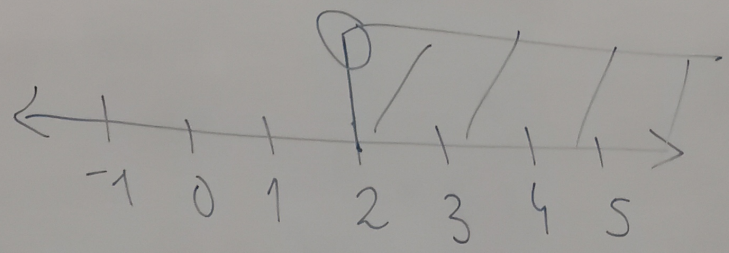
$-14x+7<3x-27$

$-14x-3x<-27-7$

$-17x<-34 \quad /:(-17)$

$x>(-34):(-17)$

$x>2$



$x\in(2,+\infty)$

25.11.20. Допълнителна подготовка

213. г) $x - \frac{20x-(10-3x)}{156} \leq \frac{26x-51}{52} - \frac{2\cdot(1-3x)}{13} \quad / \cdot 156$

$156x - \frac{156}{1}\cdot\frac{20x-(10-3x)}{156} \leq \frac{156}{1}\cdot\frac{26x-51}{52} - \frac{156}{1}\cdot\frac{2\cdot(1-3x)}{13}$

$156x - (20x-(10-3x)) \leq 3\cdot(26x-51) - 12\cdot 2\cdot(1-3x)$

$156x - (20x-10+3x) \leq 78x - 153 - 24\cdot(1-3x)$

$156x - (23x-10) \leq 78x - 153 - 24 + 72x$

$156x - 23x + 10 \leq 150x - 177$

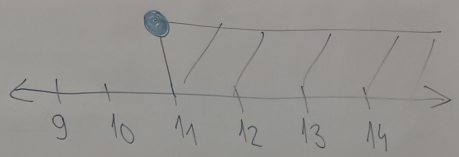
$133x + 10 \leq 150x - 177$

$133x - 150x \leq -177 - 10$

$-17x \leq -187 \quad / : (-17)$

$x \geq (-187) : (-17)$

$x \geq 11$



$x \in [11, +\infty)$