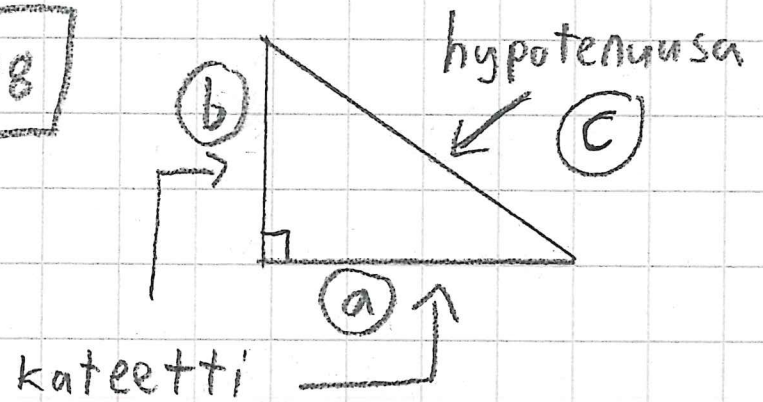
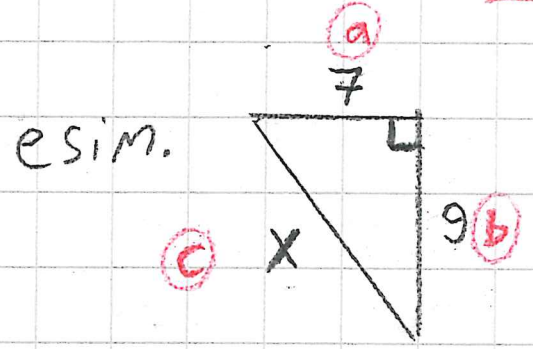
5.48

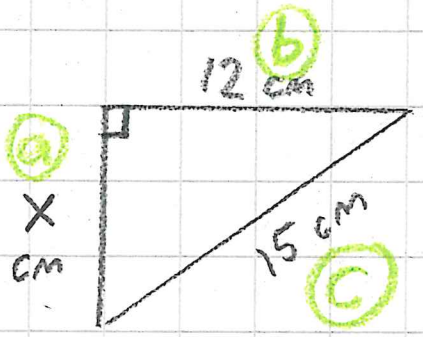


$$a^2 + b^2 = c^2$$

esim.



$$7^2 + 9^2 = x^2$$
$$49 + 81 = x^2$$
$$130 = x^2 \quad \| \sqrt{}$$
$$x = \sqrt{130}$$
$$x = 11{,}40\ldots$$
$$x \approx 11$$



$$x^2 + 12^2 = 15^2$$
$$x^2 + 144 = 225 \quad \| -144$$
$$x^2 = 81$$
$$x = \sqrt{81}$$
$$x = 9\ \text{cm}$$

S.49

167

a) $14^2 + 12^2 = x^2$

$196 + 144 = x^2$

$340 = x^2$

$x = \sqrt{340}$

$x = 18,43...$

$x \approx 18\ cm$

b) $7^2 + 2^2 = x^2$

$49 + 4 = x^2$

$53 = x^2$

$x = \sqrt{53}$

$x = 7,28...$

$x \approx 7\ m$

c) $5,2^2 + 8,3^2 = x^2$

$27,04 + 68,89 = x^2$

$95,93 = x^2$

$x = \sqrt{95,93}$

$x = 9,79...$

$x \approx 9,8\ mm$

d) $39^2 + 47^2 = x^2$

$1521 + 2209 = x^2$

$3730 = x^2$

$x = \sqrt{3730}$

$x = 61,07...$

$x \approx 61\ dm$

168

a) $x^2 + 5{,}2^2 = 9{,}4^2$

$x^2 + 27{,}04 = 88{,}36 \quad \| -27{,}04$

$x^2 = 61{,}32$

$x = \sqrt{61{,}32}$

$x = 7{,}83\ldots$

$x \approx 7{,}8$ m

b) $x^2 + 21^2 = 48^2$

$x^2 + 441 = 2304 \quad \| -441$

$x^2 = 1863$

$x = \sqrt{1863}$

$x = 43{,}16\ldots \approx 43$ cm

c) $x^2 + 10{,}2^2 = 13{,}7^2$

$x^2 + 104{,}04 = 187{,}69 \quad \| -104{,}04$

$x^2 = 83{,}65$

$x = \sqrt{83{,}65}$

$x = 9{,}146\ldots \approx 9{,}1$ cm

d) $x^2 + 0{,}8^2 = 1{,}1^2$

$x^2 + 0{,}64 = 1{,}21 \quad \| -0{,}64$

$x^2 = 0{,}57$

$x = \sqrt{0{,}57}$

$x = 0{,}754\ldots$

$x \approx 0{,}8$ m

KOTITEHTÄVÄT

169 170