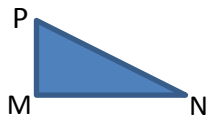
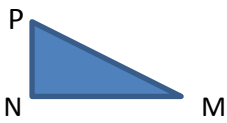
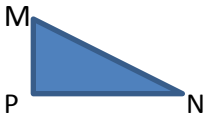
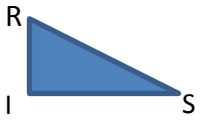
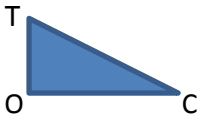
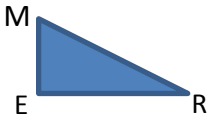
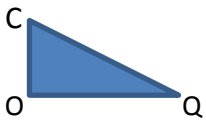
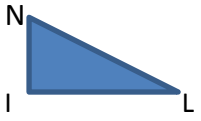
Exercice 1:

$NP^2 = MN^2 + MP^2$ $NP = \sqrt{5{,}76^2 + 5{,}2^2} = \mathbf{7{,}76}$ 	$MP^2 = MN^2 + NP^2$ $MN^2 = MP^2 - NP^2$ $MN = \sqrt{59{,}04^2 - 12{,}96^2} = \mathbf{57{,}6}$ 	$MN^2 = NP^2 + MP^2$ $MP^2 = MN^2 - NP^2$ $MP = \sqrt{549^2 - 99^2} = \mathbf{540}$ 

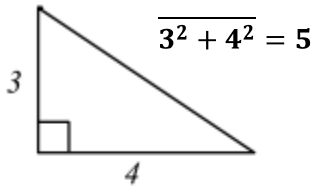
Exercice 2:

$BS^2 = BU^2 + US^2$ $BS = \sqrt{8^2 + 15^2} = \mathbf{17\ cm}$	$CR^2 = CA^2 + RA^2$ $CR = \sqrt{8{,}1^2 + 15{,}1^2} = 17{,}1\ cm$ $CR = \mathbf{171\ mm}$	$BT^2 = BU^2 + UT^2$ $UT^2 = BT^2 - BU^2$ $UT = \sqrt{10{,}5^2 - 6{,}3^2} = \mathbf{8{,}4\ cm}$

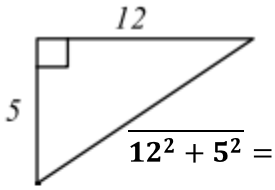
Exrecice 3:

$RS^2 = RI^2 + IS^2$ $IS^2 = RS^2 - RI^2$ $IS = \sqrt{13^2 - 12^2} = \mathbf{5\ cm}$ 	$TC^2 = TO^2 + OC^2$ $TC = \sqrt{64^2 + 48^2} = \mathbf{80\ mm}$ 	$MR^2 = ME^2 + ER^2$ $ME^2 = MR^2 - ER^2$ $ME = \sqrt{87^2 - 60^2} = \mathbf{63}$ 
$CQ^2 = CO^2 + OQ^2$ $CQ = \sqrt{7^2 + 5^2} = \mathbf{8{,}6\ cm}$ $CQ = \mathbf{86\ mm}$ 	$NL^2 = NI^2 + IL^2$ $IL^2 = NL^2 - NI^2$ $IL = \sqrt{8^2 - 6{,}5^2} = \mathbf{4{,}7}$ 	

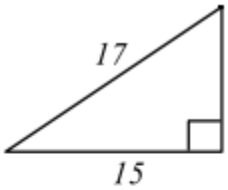
Exercice 4:



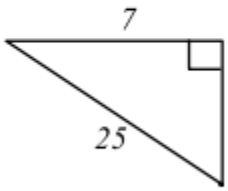
$\overline{3^2 + 4^2} = 5$



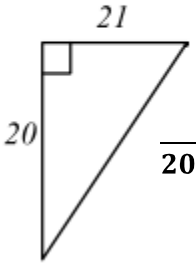
$\overline{12^2 + 5^2} = 13$



$\overline{17^2 - 15^2} = 8$



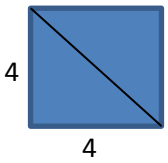
$\overline{25^2 - 7^2} = 24$



$\overline{20^2 + 21^2} = 29$

Exercice 5:

$\boldsymbol{diagonale} = \overline{4^2 + 4^2} = 5,66\ \boldsymbol{cm}$

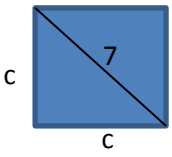


Exercice 8:

$\boldsymbol{diagonale^2} = \boldsymbol{c^2} + \boldsymbol{c^2} = \boldsymbol{2c^2}$

$\boldsymbol{c^2} = \dfrac{\boldsymbol{diagonale^2}}{\boldsymbol{2}}$

$\boldsymbol{c} = \overline{\dfrac{\boldsymbol{diagonale^2}}{\boldsymbol{2}}} = \overline{\dfrac{\boldsymbol{7^2}}{\boldsymbol{2}}} = 4,95\ \boldsymbol{cm}$



Exercice 9:

$\boldsymbol{BC^2} = BA^2 + AC^2$ *ou* $\boldsymbol{BC^2} = BD^2 + DC^2$ *ou* $\boldsymbol{BC^2} = EC^2 - EB^2$

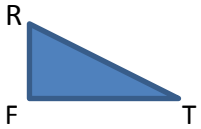
$AC^2 = \boldsymbol{BC^2} - BA^2$ *ou* $AC^2 = \boldsymbol{BD^2} + \boldsymbol{DC^2} - BA^2$ *ou* $AC^2 = \boldsymbol{EC^2} - \boldsymbol{EB^2} - BA^2$

$BD^2 = \boldsymbol{BC^2} - DC^2$ *ou* $BD^2 = \boldsymbol{BA^2} + \boldsymbol{AC^2} - DC^2$ *ou* $BD^2 = \boldsymbol{EC^2} - \boldsymbol{EB^2} - DC^2$

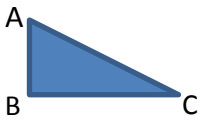
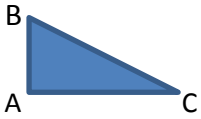
$DC^2 = \boldsymbol{BC^2} - BD^2$ ou $DC^2 = \boldsymbol{BA^2} + \boldsymbol{AC^2} - BD^2$ ou $DC^2 = \boldsymbol{EC^2} - \boldsymbol{EB^2} - BD^2$

Exercice 10:

$RT^2 = FR^2 + TF^2$
$TF^2 = RT^2 - FR^2$
$TF = \sqrt{7{,}4^2 - 2{,}4^2} = \boldsymbol{7\ cm}$



Exercice 11:

$AC^2 = AB^2 + BC^2$ $BC^2 = AC^2 - AB^2$ $BC = \sqrt{13^2 - 5^2} = \boldsymbol{12\ cm}$ 	$BC^2 = AB^2 + AC^2$ $BC = \sqrt{5^2 + 13^2} = \boldsymbol{13{,}9\ cm}$