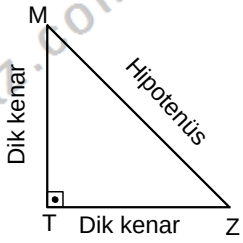
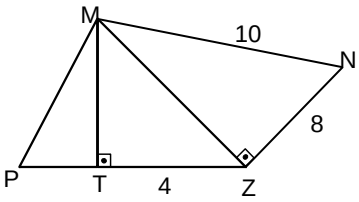
PİSAGOR BAĞINTISI

MTZ bir üçgen ve $[MT]\perp[TZ]$ ise kenarlar arasında $|TZ|^2+|MT|^2=|MZ|^2$ eşitliği geçerlidir.



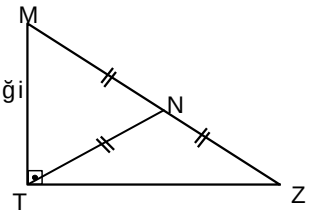
Örnek...1 :

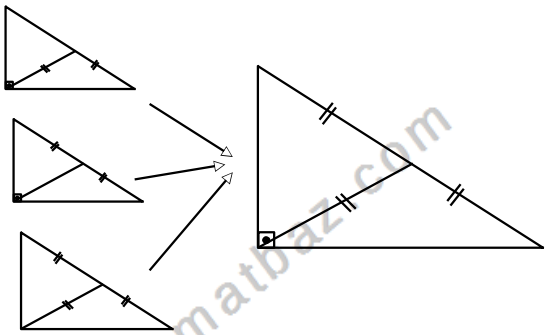
MZN bir dik üçgen, $[MT]\perp[PZ]$, $|TZ|=4br$, $|MN|=10br$, $|ZN|=8$ br ve $\frac{|MT|}{|PT|}=2$ ise $|PM|$ kaç birimdir?



HİPOTENÜSE AİT KENARORTAY

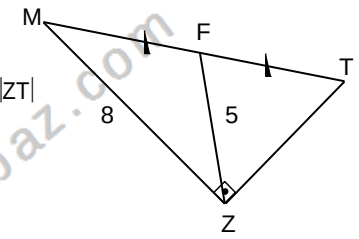
N, hipotenüsün orta noktası ise $|TN|=|MN|=|NZ|$ eşitliği geçerlidir





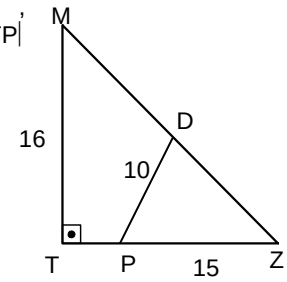
Örnek...2 :

MZT bir dik üçgen $|MF|=|FT|$ dir. $|MF|=5br, |MZ|=8$ ise, $|ZT|$ kaç birimdir?



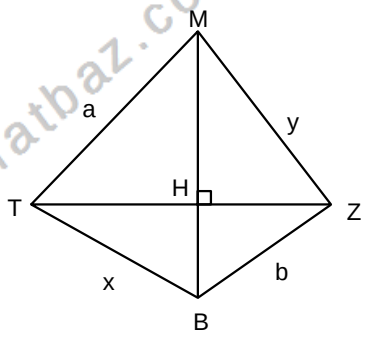
Örnek...3 :

MTZ bir dik üçgendir. $|MD|=|DZ|$, $|MT|=16br, |PD|=10br, |PZ|=15br$ $|TP|$ kaç birimdir?

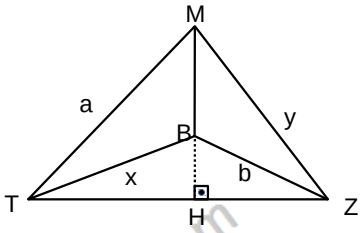


KÖŞEGENLERİ DİK KESİŞEN DÖRTGENLER

MTBZ bir dörtgen ve $[MB]\perp[TZ]$ ise $a^2+b^2=x^2+y^2$

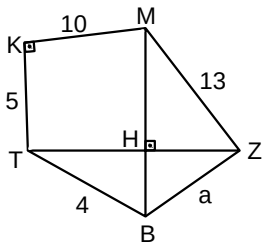


MTBZ bir iç bükey dörtgen ve $MB\perp[TZ]$ ise $a^2+b^2=x^2+y^2$



Örnek...4 :

$[MB]\perp[TZ]$ ve $[KT]\perp[MZ]$ verilen uzunluklara göre a kaçtır?



ÖKLİT BAĞINTILARI

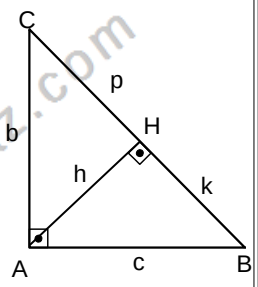
ABC bir dik üçgen ve
$[AH] \perp [BC]$,
$|AH|=h, |HB|=k, |CH|=p$
ise

$h^2=p.k$

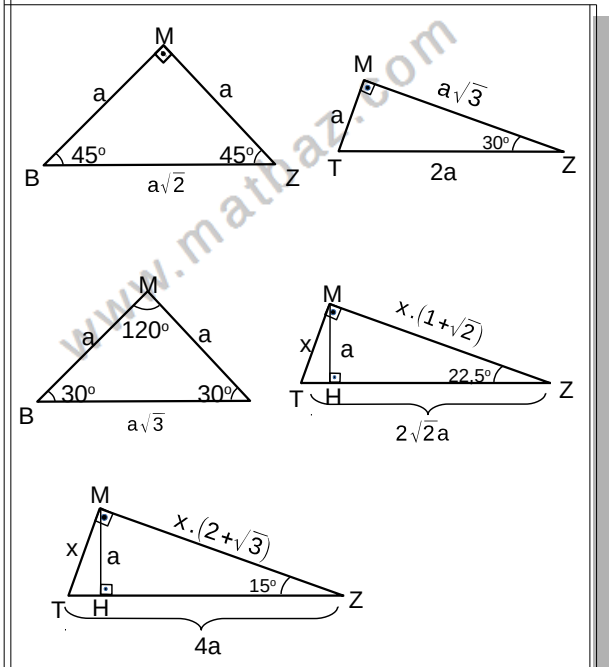
$b^2=p.(k+p)$

$c^2=k.(k+p)$

bağıntıları geçerlidir

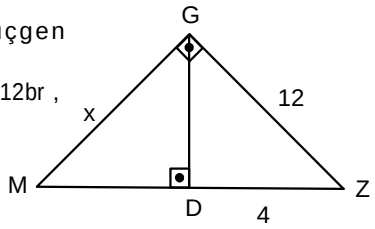


AÇILARINA GÖRE ÖZEL ÜÇGENLER



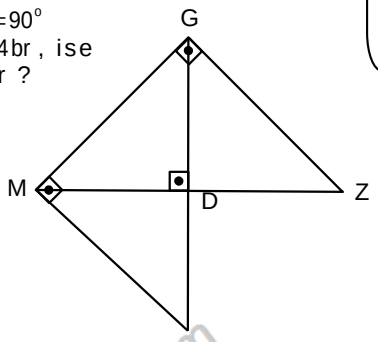
Örnek...5 :

Şekilde MGZ dik üçgen
$m(\widehat{G})=m(\widehat{MDG})=90^o$
Şekilde $|GZ|=3.|DZ|=12br$,
ise $|GM|=x$ kaç birimdir ?



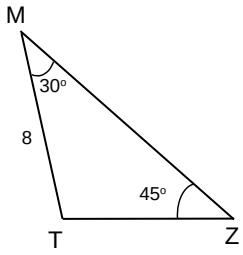
Örnek...6 :

Şekilde
$m(\widehat{G})=m(\widehat{M})=m(\widehat{MDG})=90^o$
Şekilde $|MD|=2.|DV|=4br$, ise
$|GZ|$ kaç birimdir ?



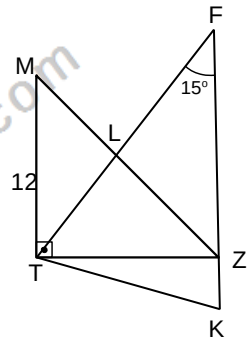
Örnek...7 :

MTZ bir üçgen
$m(\widehat{TMZ})=30^o$ $m(\widehat{TZM})=45^o$ dir.
$|MT|=8br$
ise, $|MZ|$ kaç birimdir?



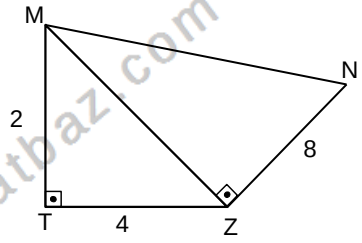
Örnek...8 :

MTZ bir dik üçgendir.
[MT] // [FK],
$|MT|=12br, |FK|=20br$,
$m(\widehat{TFK})=m(\widehat{ZTK})=15^o$
Buna göre $|MZ|$ kaç birimdir?



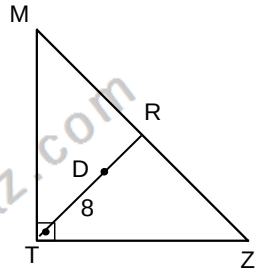
DEĞERLENDİRME – 1

1) MTZ ve MZN birer dik üçgendir.

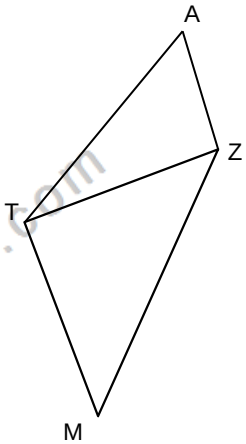


4.|MT|=2.|TZ|=|ZN|=8br ise |MN| kaç birimdir?

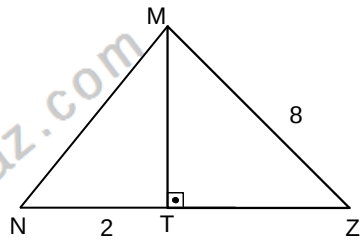
2) MTZ bir üçgen D ağırlık merkezidir |TD|=8cm, ise |MZ| kaç cm dir?



3) MTZ ve ATZ birer üçgen, [AZ]⊥[TZ] [MT] // [AZ], |AT|=2.|AZ|+1=17br , |TM|=20br Buna göre |MZ| kaç birimdir?



4) MNZ bir üçgen , [NZ]⊥[TM] , |MN|=|TZ| 4.|NT|=|MZ|=8 cm ise |MT| kaç birimdir?

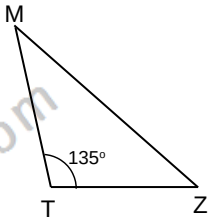


5) MTZ bir üçgen,

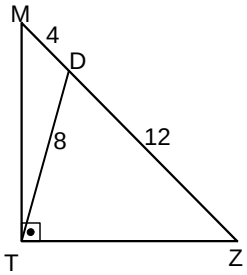
$m\widehat{MKZ}=135^{o}$

Şekilde |MT|=7br ,

$|TZ|=5\sqrt{2}$br ise |MZ| kaç birimdir ?

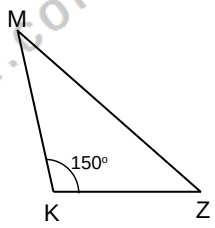


6) MTZ bir dik üçgen, 2.|MD|=|TD|=8br , |ZD|=12br ise |TZ| kaç birimdir?

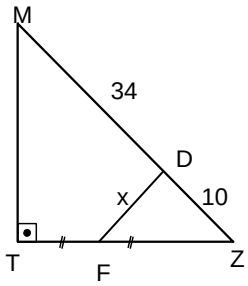


DEĞERLENDİRME – 2

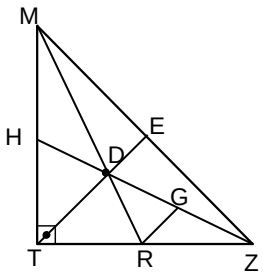
1) MKZ bir üçgen $m(\widehat{MKZ})=150^o$ dir. $|MK|=8br$, $|KZ|=6\sqrt{3}br$ ise, $|MZ|$ kaç birimdir?



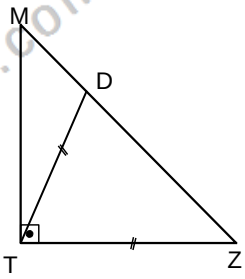
2) MTZ bir dik üçgendir. $|TF|=|FZ|$ ve $|ZD|=10br$, $|DM|=34br$, $|FD|$ kaç birimdir?



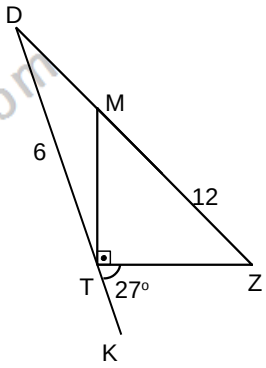
3) MTZ bir üçgen D ağırlık merkezidir. $[RG] // [TE]$, Şekilde $|MZ|=24br$, $|RG|$ kaç birimdir ?



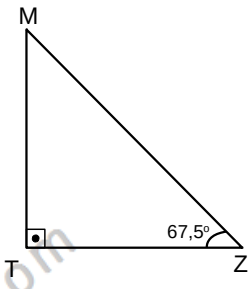
4) MTZ bir dik üçgendir. $|TD|=|TZ|$ Ve $|MD|=9br$, $|DZ|=8br$, $|TM|$ kaç birimdir?



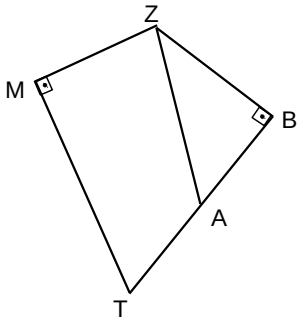
5) MTZ bir dik üçgen, $2.|TD|=|MZ|=12br$, $m(\widehat{ZTK})=27^o$ ise $m(\hat{Z})$ kaç derecedir?



6) MTZ bir dik üçgendir. $|MT|=6+6\sqrt{2}br$, $|TZ|$ kaç birimdir?



7) MTBZ bir dörtgendir. $[TM]\perp[MZ]$, $[TB]\perp[BZ]$. $|TM|=|AZ|$, $|MZ|=6br$ $|AB|=3br$, $|AT|$ kaç birimdir ?



8) MTZ bir dik üçgendir. $|MK|=|MZ|=12br$, $m(\widehat{MTZ})=22,5^o$ ise T noktasının [MZ] na uzaklığı kaç birimdir?