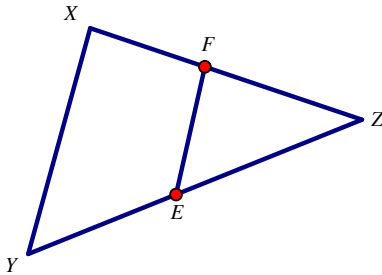


Midsegment of a Triangle

Line joining midpoints of two sides of a triangle is parallel to the third side and equal to half its length.



F is the midpoint of \overline{XZ}
E is the midpoint of \overline{YZ}

Use the figure of the left to do the following problems.

1. If $XY = 20$, find EF .
2. If $FE = 15$, find XY .
3. If $FE = 3x + 2$ and $XY = 34$, find the value of x and FE .
4. If $XY = 7x - 5$ and $FE = 22$, find the value of x and XY .
5. If $FE = 32$ and $XY = 6x + 4$, find the value of x and XY .
6. If $XY = 30$ and $FE = 4x - 1$, find the value of x and EF .
7. If $FE = 2x - 5$ and $XY = 3x + 10$, the value of x , FE and XY .
8. If $XY = 3x + 31$ and $EF = 3x + 2$, find the value of x , EF and XY .
9. If $EF = x + 6$ and $XY = x + 10$, find the value of x and EF , XY .
10. If $\angle E = 3x - 1$ and $\angle Y = 62^\circ$, find the value of x and $\angle E$.