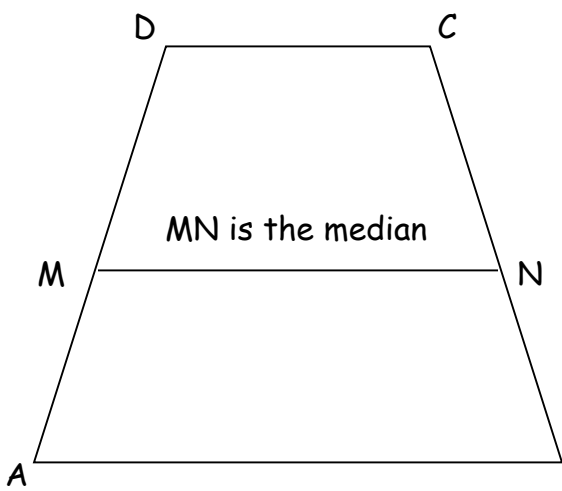


Medians in Trapezoids Worksheet

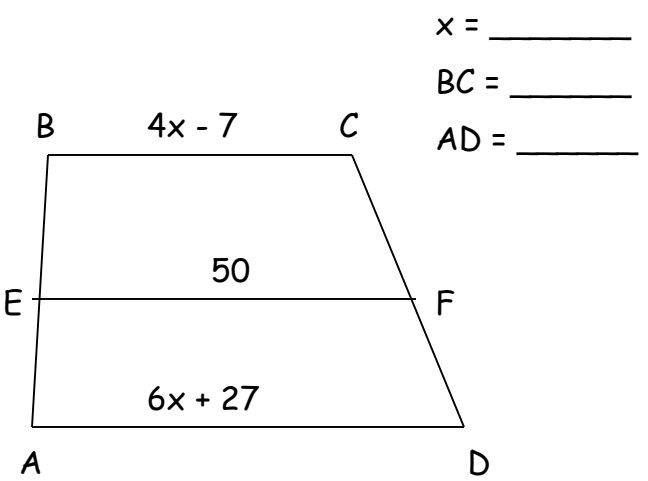
All figures in this worksheet are trapezoids.



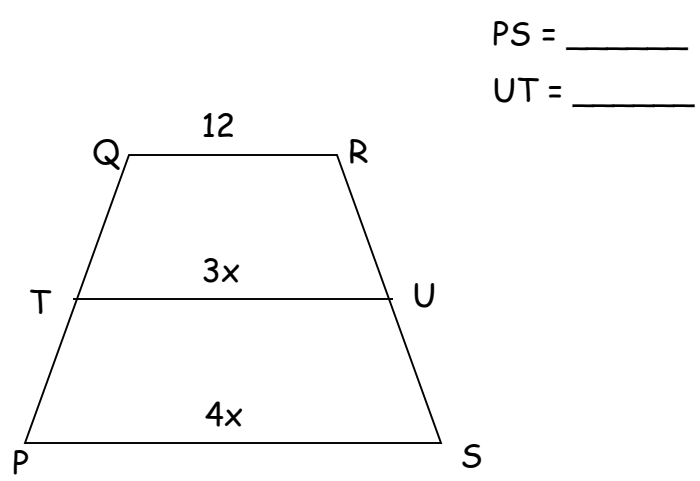
| | | | | | | | |
|----|----|------|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| DC | 14 | 7.2 | 21 | 8 | | | 19 |
| AB | 30 | 12.6 | | | 30 | 66 | 31 |
| MN | | | 28 | 18 | 25 | 40 | |

- 8. If $AM = 14$, then $DM =$ _____ and $AD =$ _____.
- 9. If $CB = 46$, then $CN =$ _____ and $BN =$ _____.
- 10. If $AM = 3x + 2$ and $DM = x + 18$, then
 $x =$ _____ $AM =$ _____ $DM =$ _____

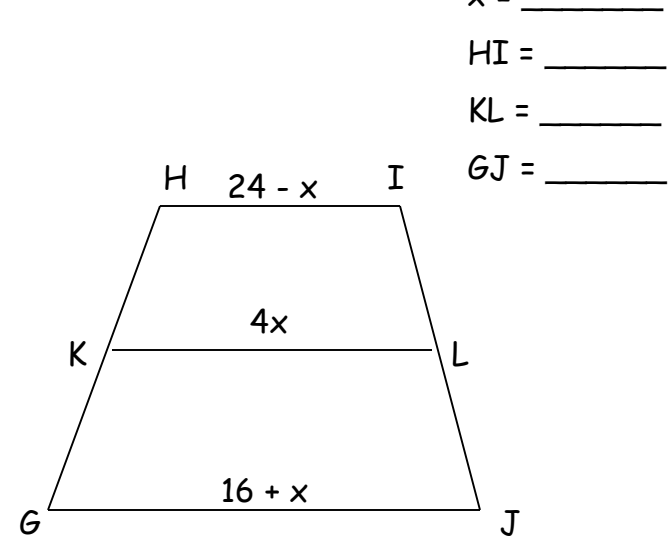
EF is the median



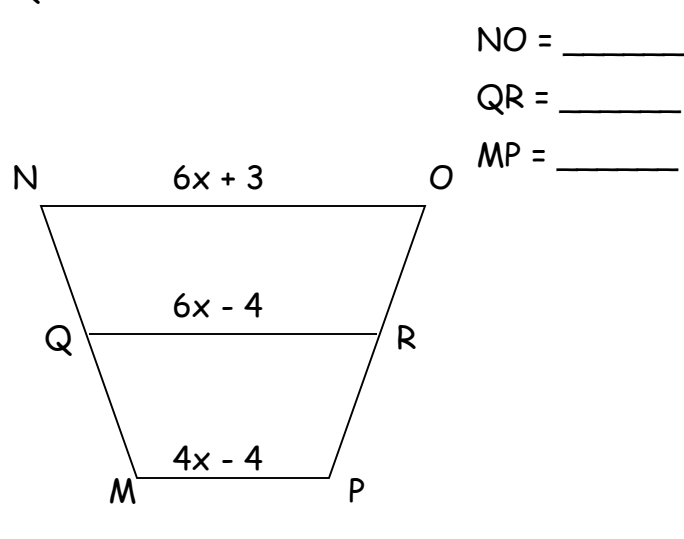
TU is the median



KL is the median



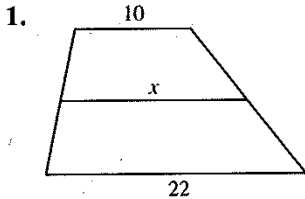
QR is the median



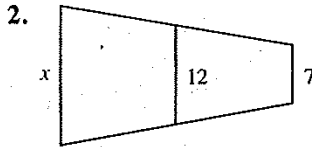
Trapezoids

For use after Section 5-5

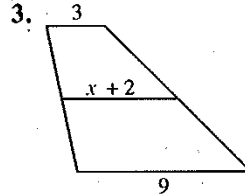
Each diagram shows a trapezoid and its median. Find the value of x .



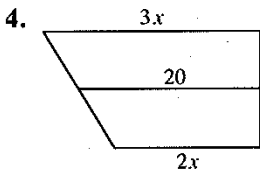
$x = \underline{\hspace{2cm}}$



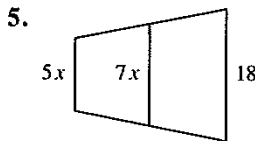
$x = \underline{\hspace{2cm}}$



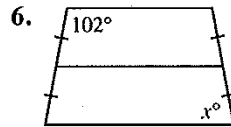
$x = \underline{\hspace{2cm}}$



$x = \underline{\hspace{2cm}}$

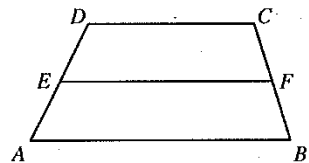


$x = \underline{\hspace{2cm}}$



$x = \underline{\hspace{2cm}}$

In Exercises 7-12 \overline{EF} is the median of trapezoid $ABCD$. Complete.

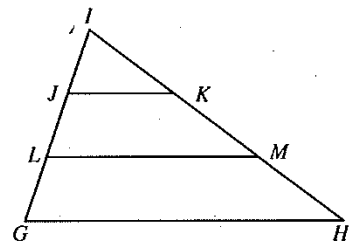


Exs. 7-12

7. If $m\angle A = 63$, then $m\angle DEF = \underline{\hspace{2cm}}$ and $m\angle D = \underline{\hspace{2cm}}$.
8. If $m\angle CFE = 72$, then $m\angle B = \underline{\hspace{2cm}}$ and $m\angle C = \underline{\hspace{2cm}}$.
9. If $AB = 16$ and $DC = 10$, then $EF = \underline{\hspace{2cm}}$.
10. If $AB = 21$ and $EF = 18$, then $DC = \underline{\hspace{2cm}}$.
11. If $ABCD$ is isosceles and $m\angle B = 65$, then $m\angle A = \underline{\hspace{2cm}}$, $m\angle D = \underline{\hspace{2cm}}$, and $m\angle C = \underline{\hspace{2cm}}$.
12. If $ABCD$ is isosceles, name all angles congruent to $\angle A$. $\underline{\hspace{2cm}}$

In Exercises 13-17 $IJ = JL = LG$ and $IK = KM = MH$.

13. If $JK = 5$, then $LM = \underline{\hspace{2cm}}$ and $GH = \underline{\hspace{2cm}}$.
14. If $LM = 12$, then $JK = \underline{\hspace{2cm}}$ and $GH = \underline{\hspace{2cm}}$.
15. If $JK = 10$ and $LM = x + 8$, then $x = \underline{\hspace{2cm}}$.
16. If $GH = 36$, then $LM = \underline{\hspace{2cm}}$ and $JK = \underline{\hspace{2cm}}$.
17. If $LM = 4x$ and $GH = x + 6$, write JK in terms of x .
 $JK = \underline{\hspace{2cm}}$. Then $x = \underline{\hspace{2cm}}$.



Exs. 13-17