

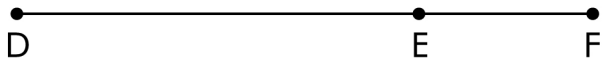
Segment Addition Postulate Worksheet

- 1) If $AB = BD$, $AB = 3x - 8$, $BD = 2x - 5$ and $AC = 38$, find BC .



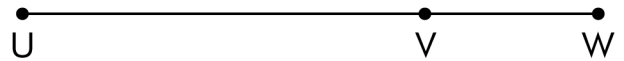
$$BC = \underline{\hspace{2cm}}$$

- 2) If $DF = 63$, $DE = 8x - 5$, and $EF = 2x + 8$, find x .



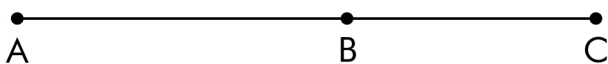
$$x = \underline{\hspace{2cm}}$$

- 3) If $UW = 7x - 27$, $UV = 3x - 5$, and $VW = x - 1$, find x .



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

- 4) If $AC = 9x - 13$, $AB = 5x - 4$, and $BC = 2x + 19$, find the value of each of the below.



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

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

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

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

Use the diagram below to answer questions 5 and 6.



- 5) If $JK = 26$ and $KL = 13$, find JL .

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

- 6) If $JL = 68$ and $JK = 27$, find KL .

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

Segment Addition Postulate Worksheet

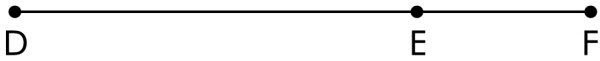
Answers

- 1) If $AB = BD$, $AB = 3x - 8$, $BD = 2x - 5$ and $AC = 38$, find BC .



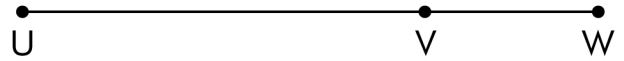
$$BC = \underline{\quad 37 \quad}$$

- 2) If $DF = 63$, $DE = 8x - 5$, and $EF = 2x + 8$, find x .



$$x = \underline{\quad 6 \quad}$$

- 3) If $UW = 7x - 27$, $UV = 3x - 5$, and $VW = x - 1$, find x .



$$x = \underline{\quad 7 \quad}$$

- 4) If $AC = 9x - 13$, $AB = 5x - 4$, and $BC = 2x + 19$, find the value of each of the below.



$$x = \underline{\quad 14 \quad}$$

$$AB = \underline{\quad 66 \quad}$$

$$BC = \underline{\quad 47 \quad}$$

$$AC = \underline{\quad 113 \quad}$$

Use the diagram below to answer questions 5 and 6.



- 5) If $JK = 26$ and $KL = 13$, find JL .

$$JL = \underline{\quad 39 \quad}$$

- 6) If $JL = 68$ and $JK = 27$, find KL .

$$KL = \underline{\quad 41 \quad}$$