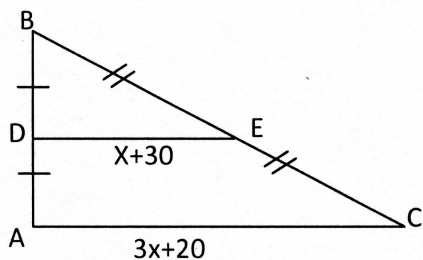


Topic 16  
Midsegments  
Practice Quiz

Key

1)



$$3x+20 = 2(x+30)$$

$$3x+20 = 2x+60$$

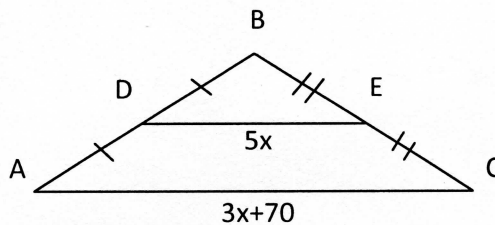
$$\begin{array}{r} -2x \quad -20 \\ \hline x = 40 \end{array}$$

$$x = 40$$

$$\overline{AC} = 140$$

$$\overline{DE} = 70$$

2)



$$3x+70 = 2(5x)$$

$$3x+70 = 10x$$

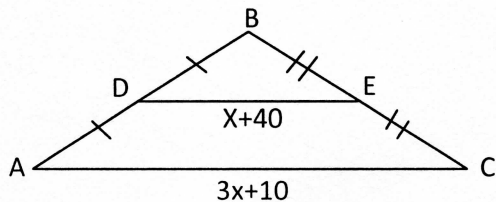
$$\begin{array}{r} -3x \\ \hline 70 = 7x \\ x = 10 \end{array}$$

$$x = 10$$

$$\overline{AC} = 100$$

$$\overline{DE} = 50$$

3)



$$3x+10 = 2(x+40)$$

$$3x+10 = 2x+80$$

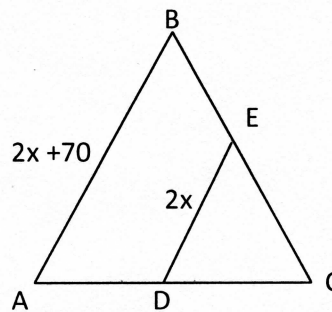
$$\begin{array}{r} -2x \quad -10 \\ \hline x = 70 \end{array}$$

$$x = 70$$

$$\overline{AC} = 220$$

$$\overline{DE} = 110$$

4)



$$2x+70 = 2(2x)$$

$$2x+70 = 4x$$

$$\begin{array}{r} -2x \\ \hline 70 = 2x \\ x = 35 \end{array}$$

$$x = 35$$

$$\overline{AB} = 140$$

$$\overline{DE} = 70$$