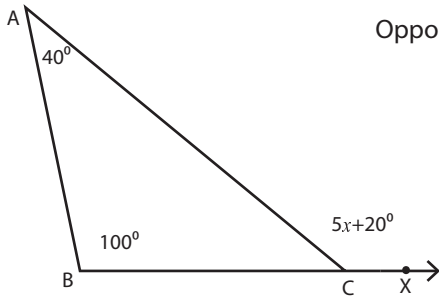
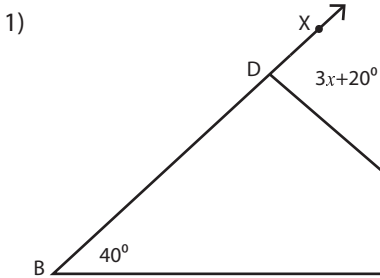


The measure of an exterior angle of a triangle is equal to sum of the measures of opposite interior angles.

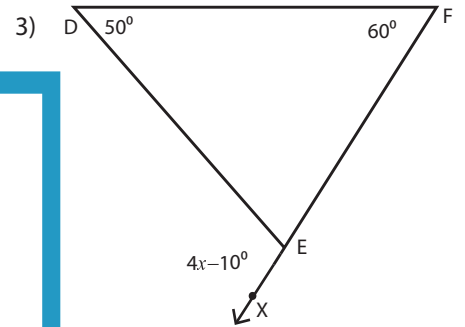
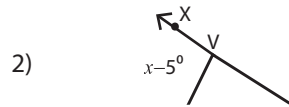


Exterior angle : $\angle ACX$
 Opposite interior angles : $\angle A$ and $\angle B$
 Exterior angle = Sum of opposite interior angles
 $\angle ACX = \angle A + \angle B = 100^\circ + 40^\circ = 140^\circ$
 $\angle ACX = 5x + 20^\circ$
 $5x + 20^\circ = 140^\circ$
 $5x = 140^\circ - 20^\circ$
 $5x = 120^\circ$
 $x = \frac{120^\circ}{5} = 24^\circ$

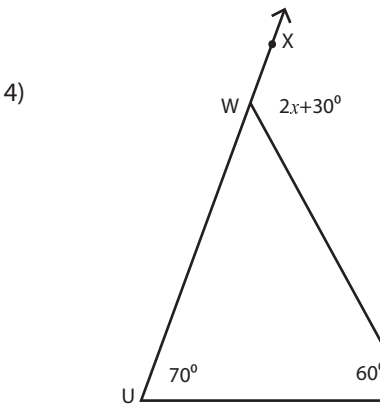
Find the unknown exterior angle and the value of x for each triangle.



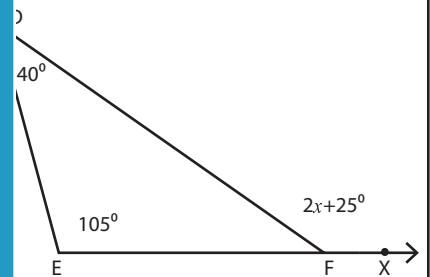
$\angle CDX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



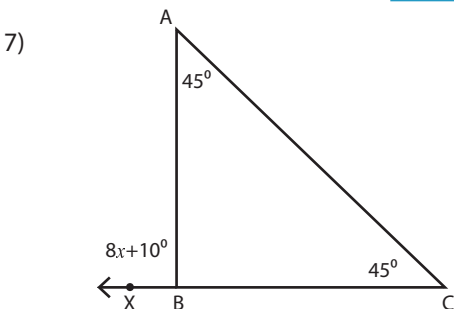
$\angle DEX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



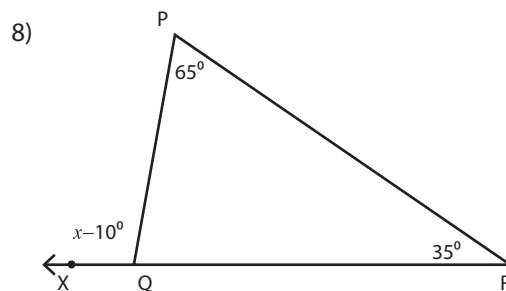
$\angle VWX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



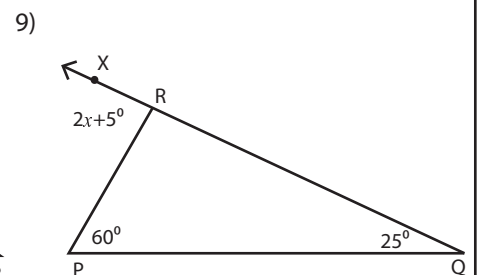
$\angle DFX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



$\angle ABX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



$\angle PQX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$



$\angle PRX = \underline{\hspace{2cm}}$; $x = \underline{\hspace{2cm}}$

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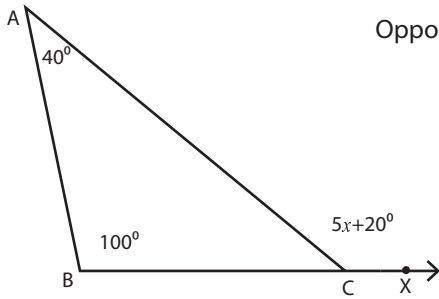
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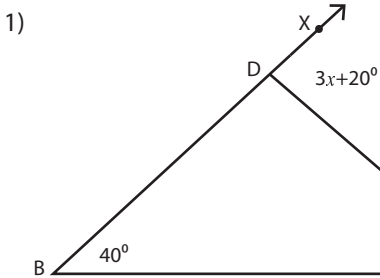
Triangle - Exterior Angle

The measure of an exterior angle of a triangle is equal to sum of the measures of opposite interior angles.

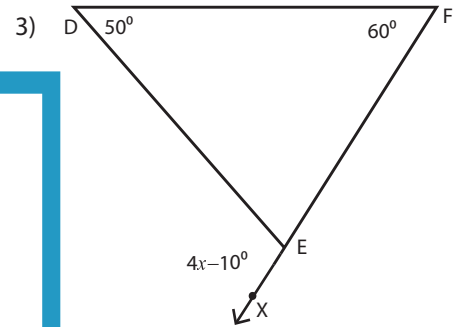
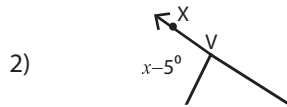


Exterior angle : $\angle ACX$
 Opposite interior angles : $\angle A$ and $\angle B$
 Exterior angle = Sum of opposite interior angles
 $\angle ACX = \angle A + \angle B = 100^\circ + 40^\circ = 140^\circ$
 $\angle ACX = 5x + 20^\circ$
 $5x + 20^\circ = 140^\circ$
 $5x = 140^\circ - 20^\circ$
 $5x = 120^\circ$
 $x = \frac{120^\circ}{5} = 24^\circ$

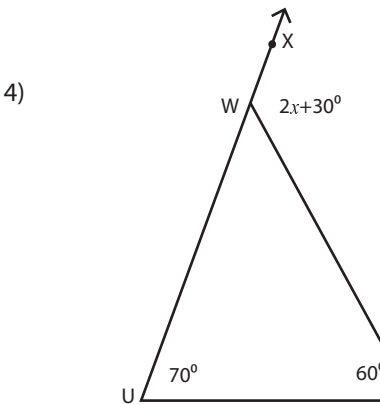
Find the unknown exterior angle and the value of x for each triangle.



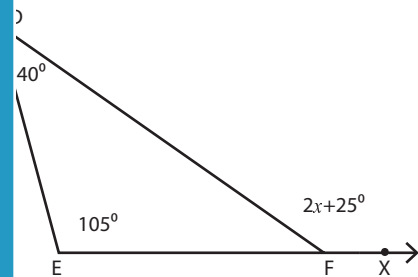
$\angle CDX = 80^\circ ; x =$ _____



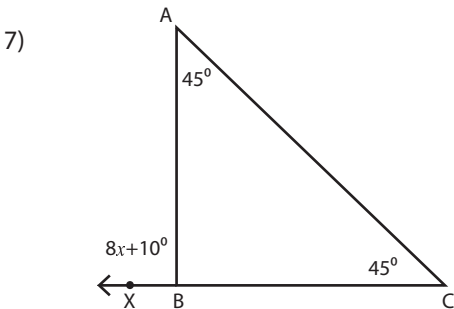
$\angle DEX = 110^\circ ; x = 30^\circ$



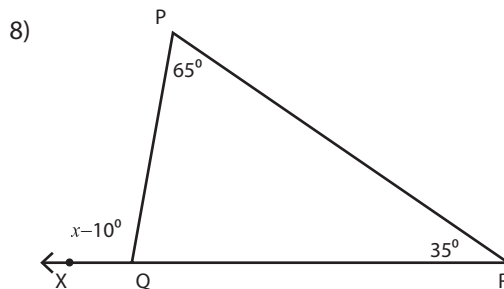
$\angle VWX = 130^\circ ; x =$ _____



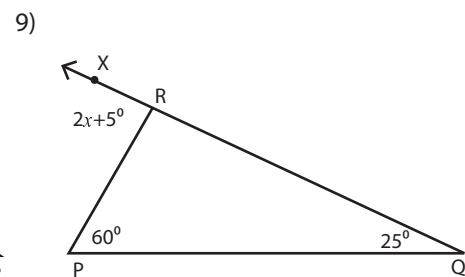
$\angle DFX = 145^\circ ; x = 60^\circ$



$\angle ABX = 90^\circ ; x = 10^\circ$



$\angle PQX = 100^\circ ; x = 110^\circ$



$\angle PRX = 85^\circ ; x = 40^\circ$

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