

# Missing angles in right angles and on straight lines

**75a**

Name:



Calculate the value of missing angle x.

a)	b)	c)
d)	e)	f)
g)	h)	i)

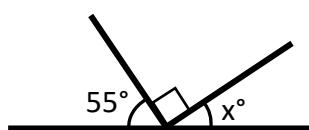
Calculate the value of missing angle x.

j)	k)	l)
m)	n)	o)



**Exam question:**

Calculate the value of x.



**35°**



# Missing angles around a point and straight line proofs

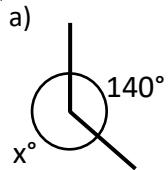
**75b**

Name:

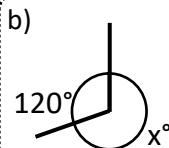


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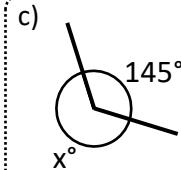
Calculate the value of missing angle  $x$ .



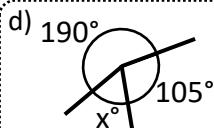
**220°**



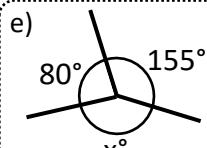
**240°**



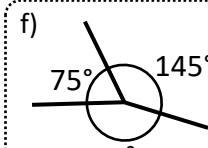
**215°**



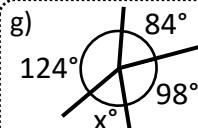
**65°**



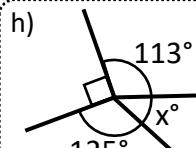
**125°**



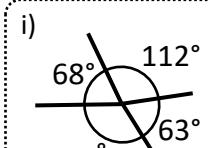
**140°**



**54°**

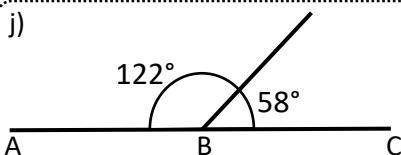


**32°**

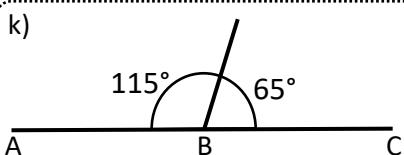


**117°**

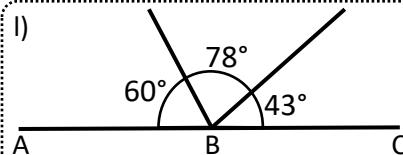
Determine if ABC is a straight line in each diagram. You must show your working.



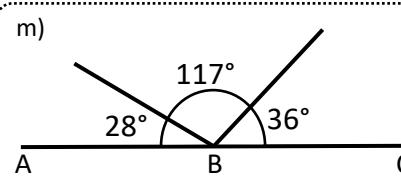
**Yes**



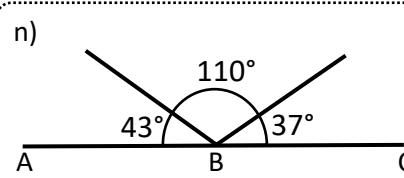
**Yes**



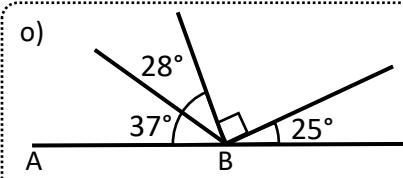
**No**



**No**



**Yes**



**Yes**

**Exam question:**

ACD is a triangle and ABD is a right angle.

Show that BEC is an equilateral triangle.

Angle BDE = 30° (isosceles) Angle BED = 120° (triangle)

Angle BEC = 60° (straight line) Angle EBC = 60° (straight line)

Angle BCE = 60° (triangle) so BCE is equilateral

