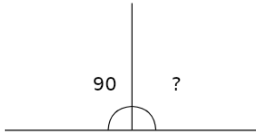


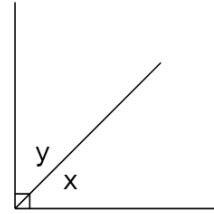
Use geometric reasoning to justify angle relationships

1

A 180° angle is made up of a 90° angle and another angle. How many degrees is the other angle?

A 85° B 65° C 100° D 110° E 90° F 70° **2**

What is the name for this pair of angles?



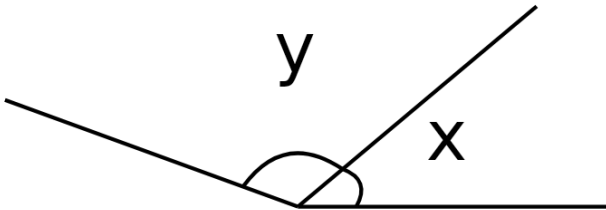
A opposite

B supplementary

C complementary

3

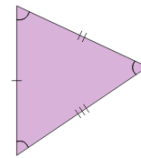
What do we know about this pair of angles?

A Angles x and y add to 90° B Angles x and y add to 180°

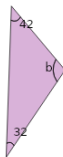
C Angles x and y don't determine each other

4

What would the sum of the inside angles on this shape be?

A 330° B 270° C 300° D 360° E 180° F 240° **5**

What is known about the angles labelled 42, 32, b



A 42 and 32 add to twice b

B 42, 32, and b add up to 360°

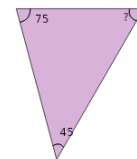
C 42 and 32 add to b

D 42, 32, and b add up to 90° E 42, 32, and b add up to 180°

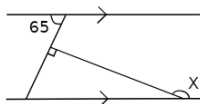
F 42 is half 32

6

Find the equation that will help you calculate the missing angle of the triangle

A $75 + 45 + ? = 90$ B $75 + 45 + ? = 180$ C $75 + 45 + ? = 360$ D $2(75 + 45 + ?) = 180$ E $75 - 45 - ? = 360$ **7**

What is angle X?



(not to scale)

A 140

B 130

C 180

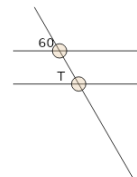
D 155

E 135

F 145

8

What do we know about angle 'T'?



A 150

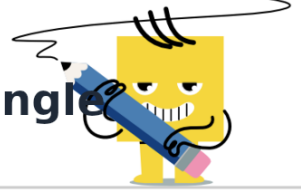
B 60

C 120

D 45

E 90

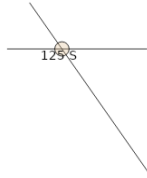
F 30



Use geometric reasoning to justify angle relationships

9

What do we know about angle 'S'?



A 55

B 45

C 145

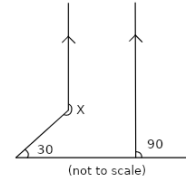
D 60

E 90

F 125

10

What is angle X?



A 230

B 255

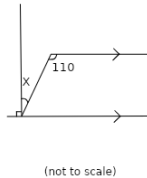
C 215

D 240

E 235

11

What is angle X?



A 35

B 15

C 45

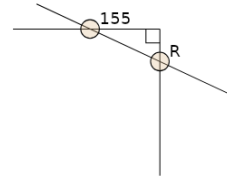
D 40

E 5

F 20

12

What do we know about angle 'R'?



A 25

B 90

C 65

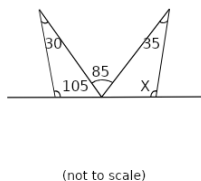
D 115

E 155

F 45

13

What is angle X?



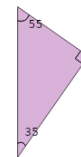
A 115

B 100

C 120

D 95

E 75

14Find the missing angle of the triangle given that the interior angles must add up to 180° 

A 113

B 105

C 75

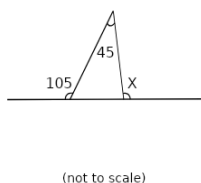
D 90

E 68

F 83

15

What is angle X?



A 140

B 115

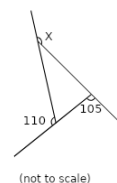
C 145

D 125

E 120

16

What is angle X?



A 145

B 165

C 130

D 160

E 120