

Year 7 Mini Test 7

<div style="text-align: center;"> <hr/> <p>40</p> <hr/> </div> <div style="text-align: right;"> <p>= _____ %</p> </div>

Name: Solutions

Date: _____

Show working and answers on this sheet. Show working in sufficient detail to support your answers. Incorrect answers without supporting reasoning may be allocated zero marks.

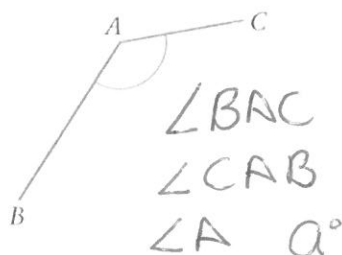
Equipment: Calculator and protractor

$\frac{1}{2}$ each

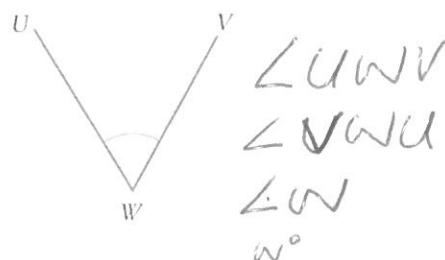
- 1) Name each of these angles in two different ways.

(2 marks)

a)

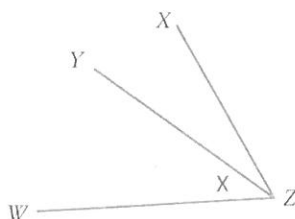


b)



- 2) The name of the angle marked X is which of the following?

(1 mark)



a) $\angle XZW$

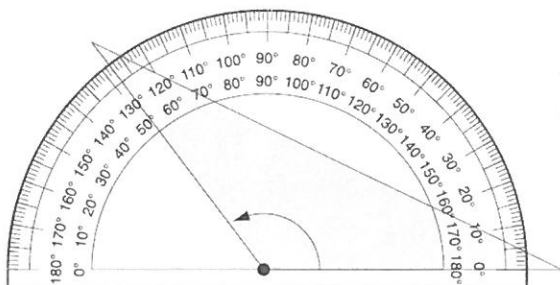
b) $\angle XZY$

c) $\angle WYX$

d) $\angle YZW$

- 3) What is the size of the angle in the shaded triangle marked by the arrow?

(1 marks)



128° ✓

- 4) Draw the following angles:

(3 marks)

a) 120°

1 mark

b) 340°

2 marks

5) Give an example of each type of angle underneath the name:

(4 marks)

a) Acute



b) Obtuse



c) Reflex



d) Revolution

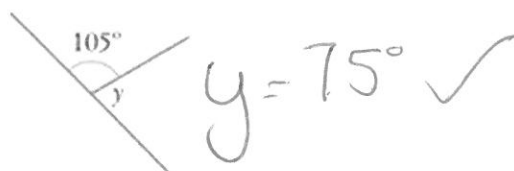


Have to mark the angle to get mark.

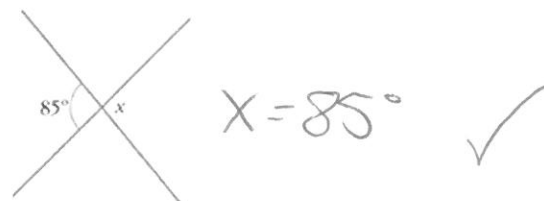
6) Find the value of the unknown:

(9 marks: 1, 1, 1, 1, 2, 2, 1)

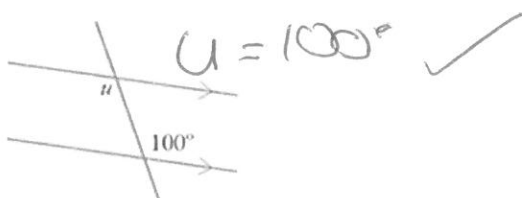
a)



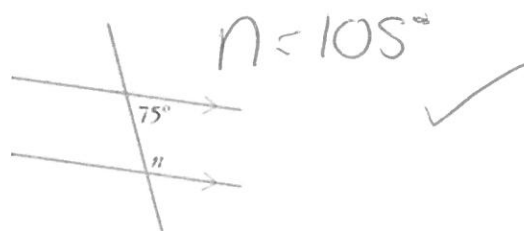
b)



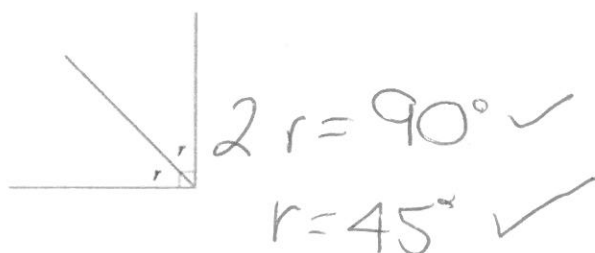
c)



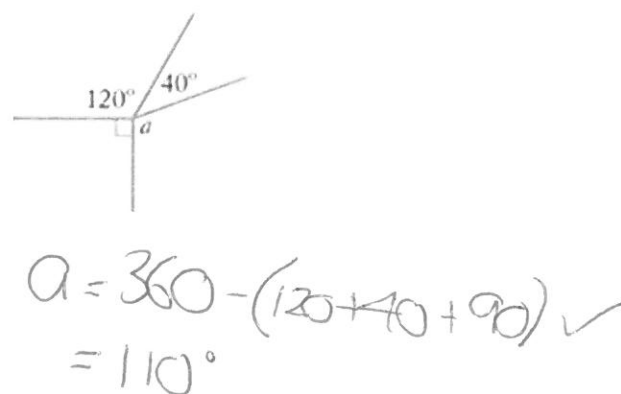
d)



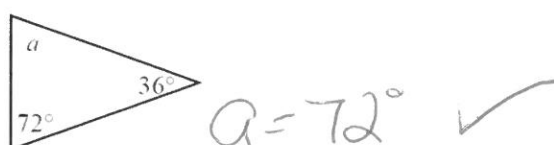
e)



f)



g)



- 7) A triangle has two equal sides and one angle of 98° . What is another angle in this triangle? (2 marks)



$$2x = 180 - 98 \\ = 82^\circ \\ x = 41^\circ \quad \checkmark$$

- 8) Complete the table below:

(3 marks)

Decimal	Percentage	Fraction
0.12	12%	$\frac{12}{100}$
0.6	60%	$\frac{60}{100}$
0.4	40%	$\frac{2}{5}$

- 9) What percentage is 16 marks out of 20 marks?

(1 mark)

$$\frac{16^{ms}}{20^{ms}} = \frac{80}{100} = 80\% \quad \checkmark$$

- 10) What is \$10 as a percentage of \$40?

(1 mark)

- a) 4% b) 10% c) 25% d) 40%

- 11) Calculate 75% of 40

(1 mark)

$$30 \quad \checkmark$$

- 12) 20% of the 140 photographs at an exhibition were black-and-white. How many black-and-white photographs were there?

(1 mark)

$$28 \quad \checkmark$$

- 13) Kyle won 17 games out of a possible 20. What percentage of games did he lose?

(2 marks)

$$\frac{3}{20} = \frac{15}{100} = 15\% \quad \checkmark$$

- 14) The Maths class has 11 girls and 13 boys.

(2 marks: 1, 1)

- a) What is the ratio of boys to girls?

$$13:11 \quad \checkmark$$

- b) What is the ratio of girls to the total number in the class?

$$11:24 \quad \checkmark$$

15) The cordial is mixed with water in the ratio of 1 : 3. How much Cordial is needed to make a mixture of 2L?

$$\begin{aligned}\text{Total parts} &= 1+3 \\ &= 4 \quad \checkmark\end{aligned}$$

$$2 \div 4 = 0.5\text{L} \quad \checkmark \quad (2 \text{ marks})$$

16) Write each of the following as a rate:

(2 marks: 1, 1)

a) Write \$40 for 10 trees

$$\text{\$4/tree} \quad \checkmark$$

b) 100 m in 10 seconds

$$10 \text{ m/s} \quad \checkmark$$

17) A water tank of capacity 80 litres takes 18 minutes to fill. At what rate is the tank being filled? (1 mark)

$$4.4 \text{ L/min} \quad \checkmark$$

18) A block of cheese costs \$13/kg. How much would 2.2 kg cost?

(1 mark)

$$2.2 \times 13 = \$28.60 \quad \checkmark$$

19) What type of quadrilateral am I?

(1 mark)

I have 4 sides.

I have two pairs of equal sides.

I have two pairs of equal angles.

I have two pairs of parallel sides.

I am a Parallelogram \checkmark

~End of Test~