test 3 Year 8 name:

Section1 >

1. – 23.67 – 19.87 – 0.25 + 0.01024874

(2)

2. If I eat – of a pizza every day, how many days would 400 pizzas last for?

(2)

3. Subtract one third of 48 from the product of 60 and 44.

(3)

4. Evaluate 3– ÷ 3–

(2)

5. I got 12 out of 480 in a Latin test. What % did I get?

(2)

Section 2 >

1. Divide $3556 in the ratio of 10 : 4

(2)

2. David and Jon found a wallet and divided the cash in the ratio of 5 : 4. If the largest share was £321, how much was in the wallet?

(2)

3. To make 5 portions of cake you need 300g of sugar, and 175g of milk. What is the total mass of the ingredients needed for 7 portions?

(2)

4. Three trees have heights in the ratio of 3 : 10 : 12. If the tallest is 40m tall, what is the difference in height between the smallest and the middle tree?

(2)

5. Divide £100 in two parts so that the larger part is £1.45 more than the smaller.

(2)

Section 3 >

1. Rewrite these numbers to the stated level of accuracy:

i. 23.986 to 1 d.p. ☐

ii. 345.009 to 1 d. p. ☐

iv. 450000600 to 3 sig. figs. ☐

(6)

2. By rounding the numbers appropriately, estimate these sums to **ONE SIG. FIG.**

i. _____

ii. _____

(4)

Section 3 >

1. Solve these equations:

i. $-3x - 8 = -292 - 2(1 - 2x)$

ii. $2 - 5(x - 8) = -12 - x + -(2x - 1)$

iii. $2 - 4x = -(14 - x) - -(2x - 33)$

iv. $\frac{}{} = \frac{}{}$

(8)

2. Given that **a = 30** **b = –2** **c = 0.1** find

i. $(a^2 + b^2)^2$

ii. $c(b^3 – ab) – 99c^2$

iii. $3abc – acb – bac^3$

(6)

3. i. If a coffee costs c pence and tea costs t pence, what is the total cost of x teas and y coffees?

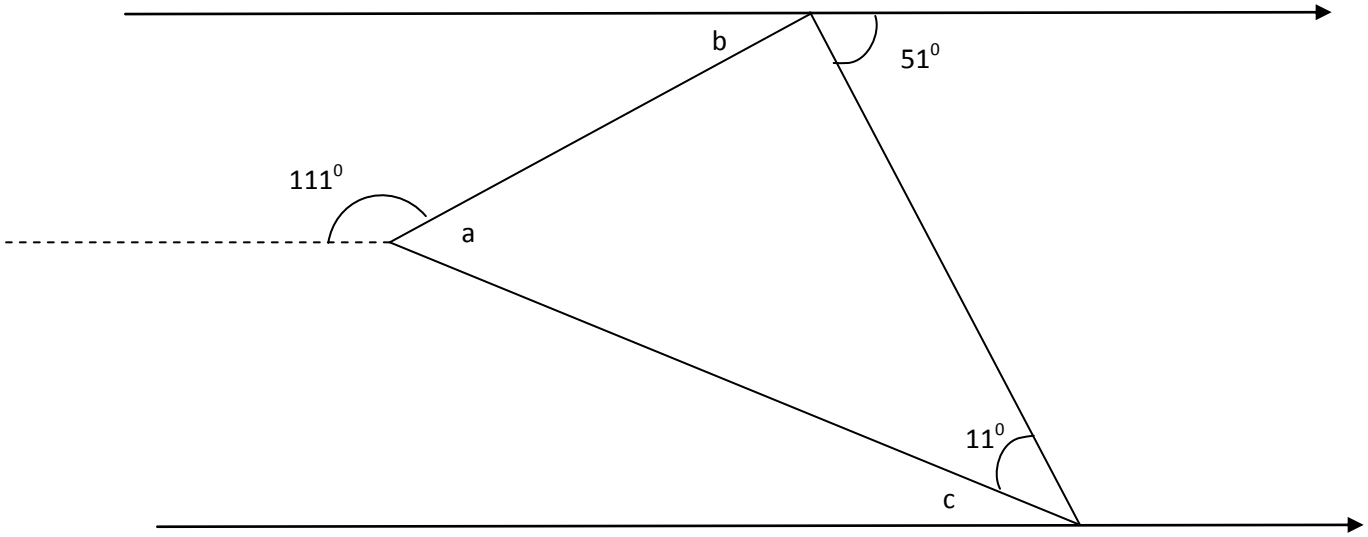
(2)

ii. I bought 16 drinks and spent £6.60. If tea costs 30p and coffee 50p, how many cups of each did I buy?

(3)

Section 4 >

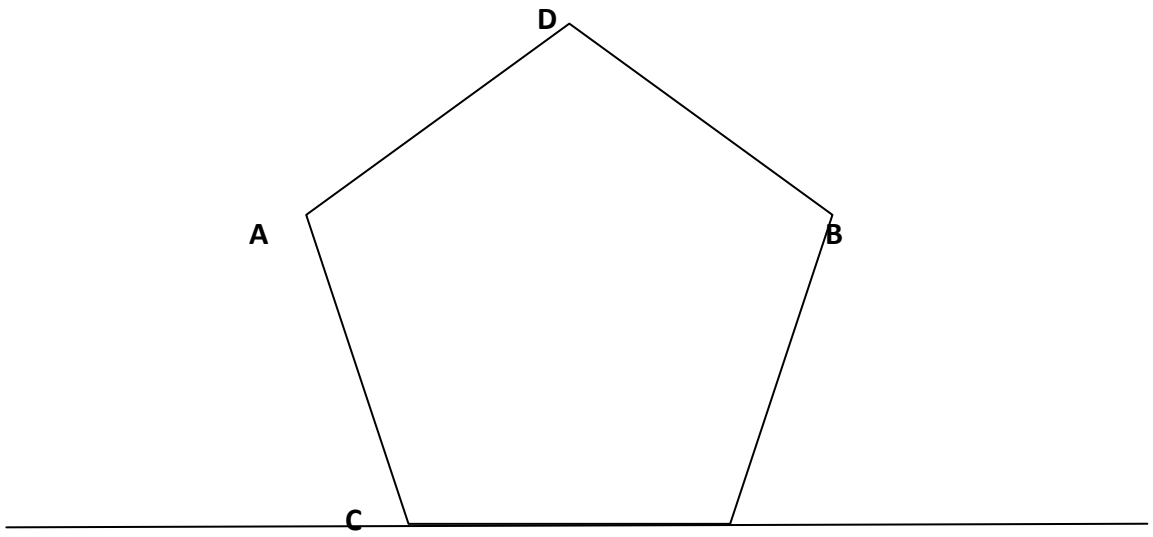
1. Find the angles a, b, c, d in this diagram :



a = b = c = d =

(8)

2. Find the BEARINGS between these points on a regular pentagon.



i. From A to C

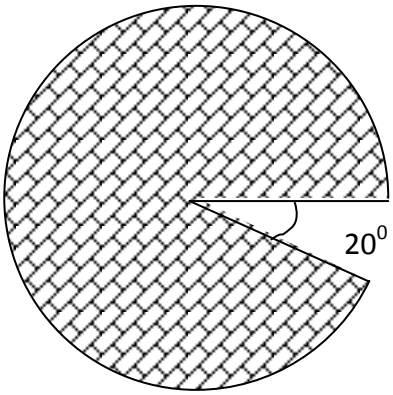
ii. From B to C

iii. From D to C

(6)

Section 5> Circles

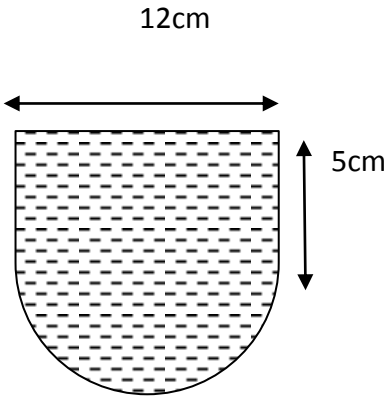
1. Find the perimeter of these shapes:

i. 

r = 10cm

P =

ii.

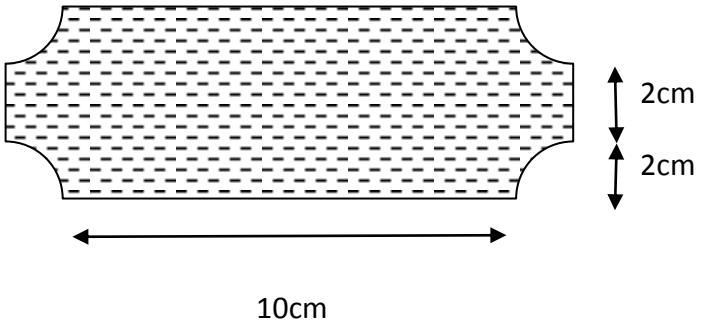


P =

(6)

2. Find the area of this shape:

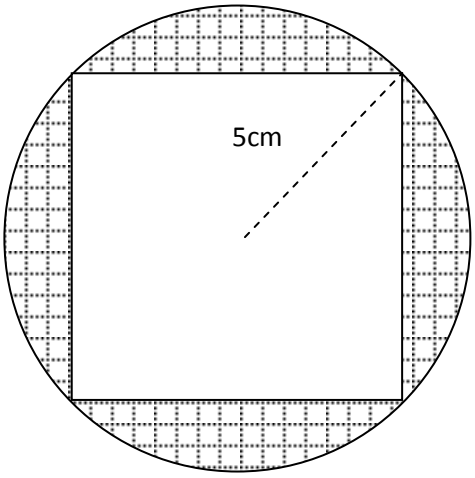
i.



A =

(3)

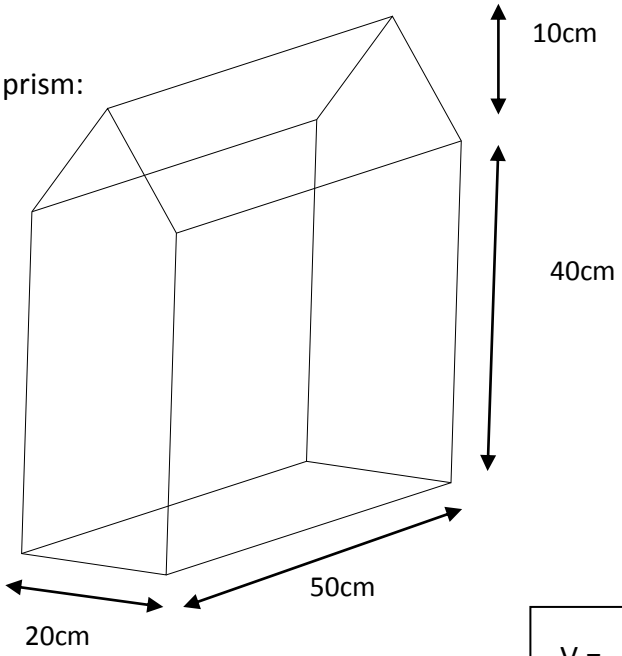
ii. Find the shaded area of this diagram:



(3)

A =

iii. Find the volume of this prism:



V = litres

(3)