

1. Arrange in order of size      0.40,   24%,    $\frac{7}{25}$ .

*Answer* ..... < ..... < ..... [1]

2. Work out       $4 + 6 \times 2 - 1$ .

*Answer* ..... [1]

3.       $x = \frac{5y}{3} - 2$

- a) Find the value of  $x$ , when  $y=12$ .

*Answer*  $x =$  ..... [1]

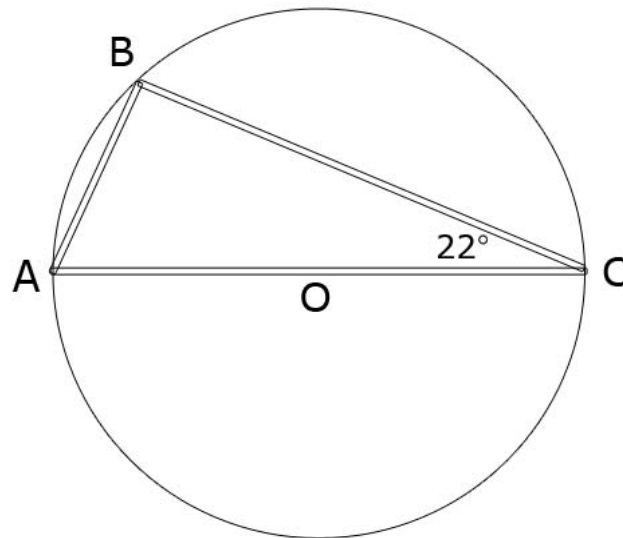
- b) Find the value of  $y$  when  $x=8$ .

*Answer*  $y =$  ..... [2]

- c) Make  $y$  the subject of the equation.

*Answer*  $y =$  ..... [1]

4.



Not to scale

- a) Give the name of the line AC.

Answer ..... [1]

- b) State the size of the angle ABC.

Answer  $ABC = \dots\dots\dots^\circ$  [1]

- c) Calculate the size of the angle CAB.

Answer  $CAB = \dots\dots\dots^\circ$  [1]

5. In the space below construct,

A •

• B

- a) the locus of points equidistant from  $A$  and  $B$ . [2]
- b) 3 cm from  $B$ . [1]

6. Work out, showing all your calculations,

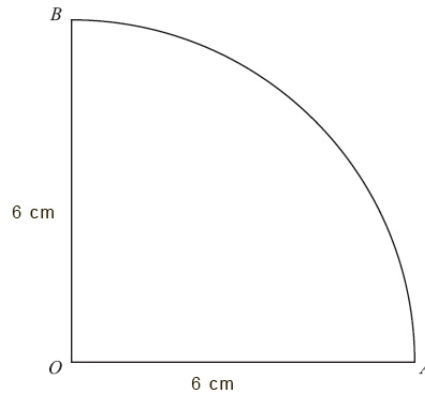
a)  $0.86 + 1\frac{1}{5}$

Answer ..... [2]

b)  $\frac{3}{4} \div \frac{3}{8}$

Answer ..... [2]

7. The diagram below shows a quarter-circle with a radius of 6 cm.



a) Find the area of the quarter-circle shown in the diagram.

Answer .....cm<sup>2</sup> [2]

b) Find the length of the perimeter of the quarter-circle shown in the diagram.

Answer .....cm [3]

8. Look at the sequence of numbers

....., 3, 5, 7, 11, 13, 17, .....

a) Write the two numbers that are missing above.

Answer .....and..... [2]

b) Give a name for this sequence of numbers.

Answer ..... [1]

9. Yasmine wishes to borrow \$12000 from the bank to start her own business.  
The bank charges Yasmine 6% per annum interest for the amount borrowed.

- a) Calculate the amount of **simple interest** Yasmine will owe the bank after 1 year.

Answer \$..... [1]

- b) Yasmine's pays \$15000 for her business and sells it at the end of the year for \$12000.  
Calculate the percentage loss that Yasmine has made.  
(This does not include her interest to the bank).

Answer .....% [2]

10. 5 positive whole numbers have a mode of 8, a range of 8, a median of 10 and a mean of 11.

Find the five numbers.

Answer ..... [3]

Answers

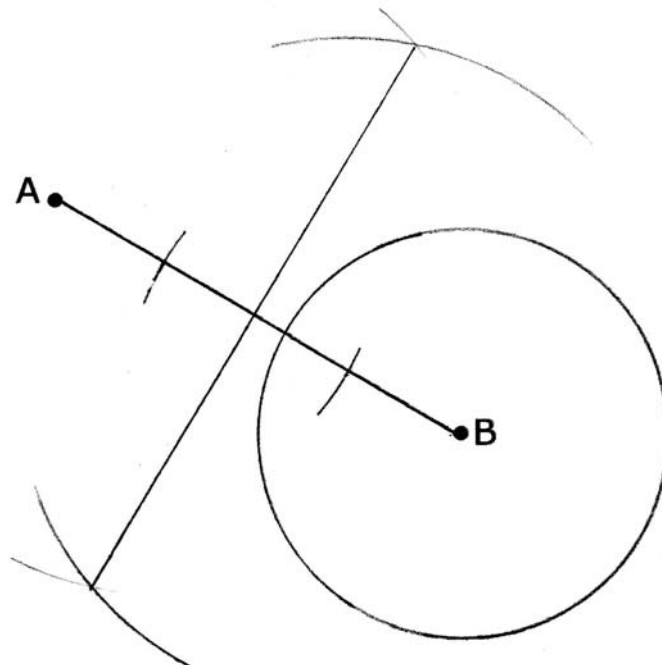
1.  $24\% < \frac{7}{25} < 0.40$

2. 15

3. a) 18      b) 6      c)  $y = \frac{3(x+2)}{5}$  or  $y = \frac{3x+6}{5}$

4. a) Diameter (accept hypotenuse)      b)  $90^\circ$       c)  $68^\circ$

5. a) and b)



6. a)  $\frac{0.86 + 1.20}{2.06}$

b)  $\frac{3}{4} \times \frac{8}{3} = \frac{1}{1} \times \frac{2}{1} = 2$

7. a) 28.3

b) 21.4

8. a) 2 and 19

b) Prime

9. a) \$720

b) 20%

10. 8,8,10,13,16