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\begin{gathered}
\text { KumardMaths } \\
\text { Pearson Edexcel } \\
\text { GCSE Maths }(9-1) \\
\text { Past Exam Questions by } \\
\text { Topics: Advanced } \\
\text { Trigonometry. }
\end{gathered}
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1.


Calculate the length of the side $B C$.
Give your answer correct to 3 significant figures.
$\qquad$
2. Here is a parallelogram.


Diagram NOT
accurately drawn
$D C=7 \mathrm{~cm}, C B=5 \mathrm{~cm}$, Angle $A B C$ is $40^{\circ}$
Work out the area of the parallelogram.
Give your answer correct to 1 decimal place.
$\mathrm{cm}^{2}$
3. Here is a triangle $A B C$.

$A C=90 \mathrm{~m} ., B C=60 \mathrm{~m}$. , Angle $A C B=130^{\circ}$.
Calculate the perimeter of the triangle. Give your answer correct to one decimal place.
4. The diagram shows an equilateral triangle.


The area of the equilateral triangle is $36 \mathrm{~cm}^{2}$. Find the value of $x$. Give your answer correct to 3 significant figures.

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x=
$$

$\qquad$
5. $A B C$ is a triangle.


Diagram NOT
accurately drawn
$A C=8.4 \mathrm{~m}$, Angle $A C B=40^{\circ}$. The area of the triangle $=100 \mathrm{~m}^{2}$.
Work out the length of $A B$.
Give your answer correct to 3 significant figures.
$\qquad$
6.


The area of triangle $A B C$ is $6 \sqrt{2} \mathrm{~m}^{2}$. Calculate the value of $x$. Give your answer correct to 3 significant figures.
7. Here is a shaded shape $A B C D$.


The shape is made from a triangle and a sector of a circle, centre $O$ and radius 6 cm . $O C D$ is a straight line.
$A D=14 \mathrm{~cm}$
Angle $A O D=140^{\circ}$
Angle $O A D=24^{\circ}$
Calculate the perimeter of the shape.
Give your answer correct to 3 significant figures.
8.


Work out the length of $A D$.
Give your answer correct to 3 significant figures.
9. $A B C$ and $A D C$ are triangles.


The area of triangle $A D C$ is $56 \mathrm{~m}^{2}$
Work out the length of $A B$.
Give your answer correct to 1 decimal place.
10.


In the triangle $X Y Z$
$X Y=8.7 \mathrm{~cm}$,
$Y Z=11.6 \mathrm{~cm}$,
Angle $X Y Z=52^{\circ}$
(a) Work out the area of triangle $X Y Z$.

Give your answer correct to 3 significant figures.
(b) Work out the length of $X Z$.

Give your answer correct to 3 significant figures.
11.


Work out the area of the quadrilateral $A B C D$.
Give your answer correct to 3 significant figures.
$\mathrm{cm}^{2}$
12.


The area of triangle $A B C$ is $42 \mathrm{~cm}^{2}$
Find the length of $A B$.
Give your answer correct to 3 significant figures.
$\qquad$

