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| **National 5 Homework Exercise 17** | C:\Users\Ian\Pictures\CHS.jpg |
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| **Trig Formulae** |
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| Issued by: |  | Return by: |  |
|  |
| **1.** | In each triangle below, find the missing value **accurate to 3 significant figures** |
|  |
|  | a) | Find side BC. | b) | Find angle QRP | c) | Find side YZ |
|  | ACB12cm70°28° | RPQ45mm35°70mm | YXZ1.7m52°3.1m |
|  | d) | Find side GH | e) | Find side DF | f) | Find angle STU |
|  | FHG40cm65°49° | FD4m62°6mE | UTS15cm17cm23cm |
|  |  |  |  |
| **2.** | Find the areas of triangles XYZ and DEF above. |
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| **3.** | CDBA70m115m95m103m125m | A surveyor has to find the area of a plot of land in the shape of an irregular quadrilateral.  |
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|  | After measuring the lengths of the sides and one diagonal, she makes the diagram below. |
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|  | a) Find the size of angle ABC |
|  |  |
|  | b) Use your answer to find the area of triangle ABC |
|  |  |
|  | c) Find the total area of the plot of land. |
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| **4.** | A Jetski and a Speedboat leave a Harbour at the same time. | NNN252°110°35°HJS |
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|  | The Jetski travels on a bearing of 035° at an average speed of 45 km/hr. |
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|  | The speedboat travels at an average speed of 70 km/hr. |
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|  | After 12 minutes, the Speedboat is on a bearing of 110° from the Jetski, and the Harbour is on a bearing of 252° from the Speedboat. |
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|  | Find the distance between Jetski and the Speedboat after 12 minutes, accurate to the nearest 100m. |
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