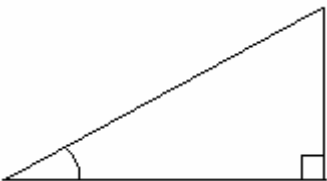
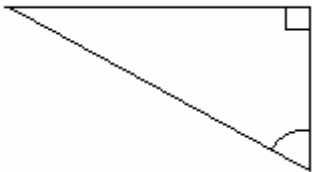
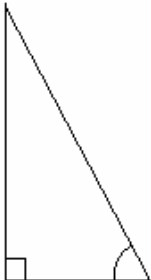
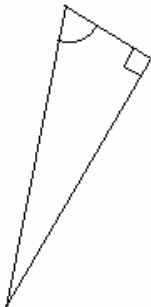
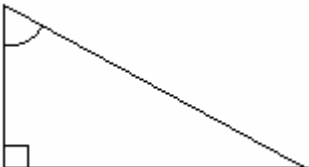
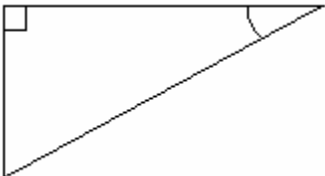
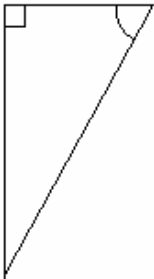
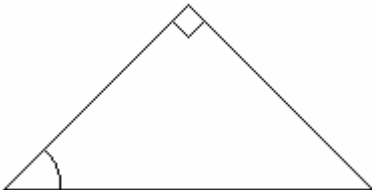
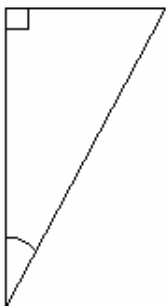
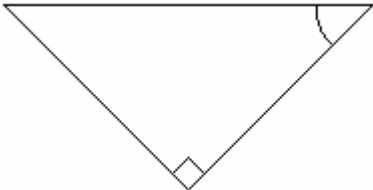


Trigonometry Worksheet T1 – Labelling Triangles

Label the sides of the triangles below with O for Opposite, A for Adjacent and H for Hypotenuse,

1. 	7. 
2. 	8. 
3. 	9. 
4. 	10. 
5. 	11. 
6. 	12. 

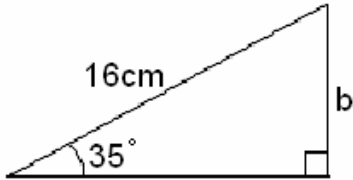
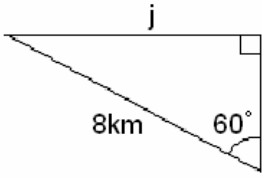
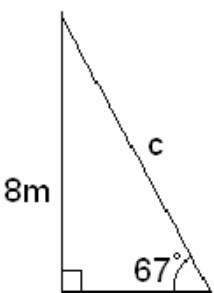
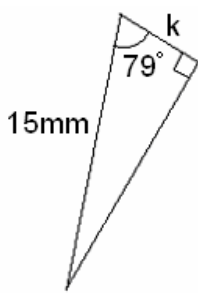
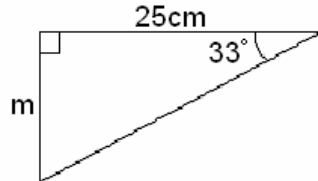
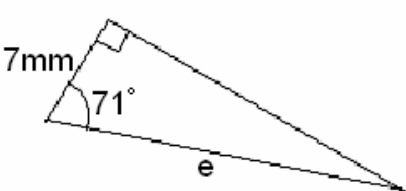
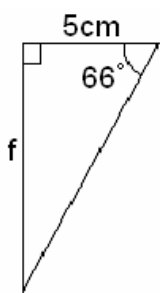
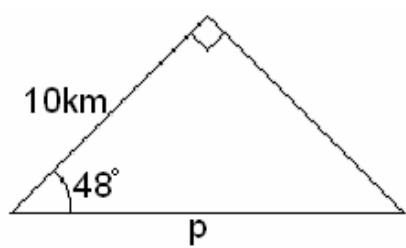
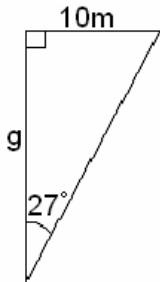
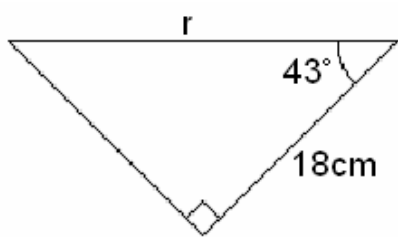
Trigonometry Worksheet T2 – Sine, Cosine & Tangent Values

Give the value of each of the following:

- | | |
|--------------------|---------------------|
| 1. $\sin 25^\circ$ | 10. $\sin 27^\circ$ |
| 2. $\cos 53^\circ$ | 11. $\cos 12^\circ$ |
| 3. $\tan 34^\circ$ | 12. $\tan 89^\circ$ |
| 4. $\sin 22^\circ$ | 13. $\sin 32^\circ$ |
| 5. $\cos 75^\circ$ | 14. $\cos 36^\circ$ |
| 6. $\tan 83^\circ$ | 15. $\tan 42^\circ$ |
| 7. $\sin 57^\circ$ | 16. $\sin 55^\circ$ |
| 8. $\cos 89^\circ$ | 17. $\cos 38^\circ$ |
| 9. $\tan 44^\circ$ | 18. $\tan 51^\circ$ |

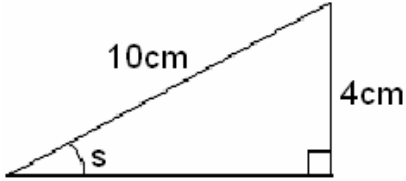
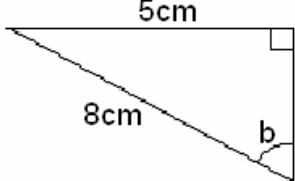
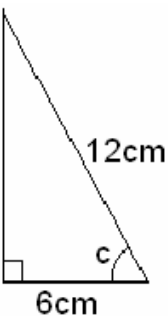
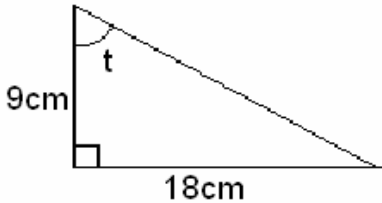
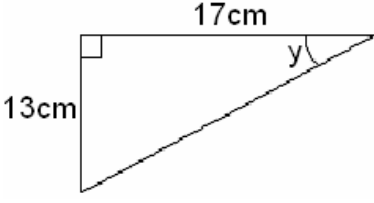
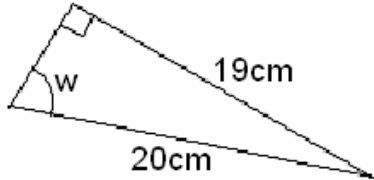
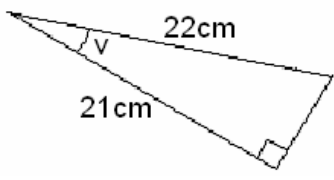
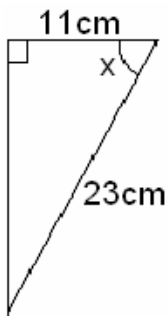
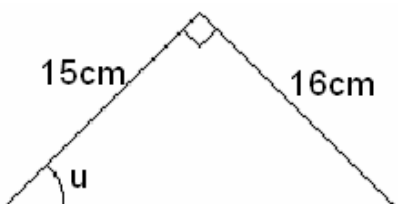
Trigonometry Worksheet T3 – Calculating Sides

Work out the sides labelled. Questions 1 and 2 require Sine, questions 3 and 4 require Cosine, question 5 and 6 require Tangent. The rest you will need to work out which to use and how! (Worksheet T1 may help you!!)

1. 	7. 
2. 	8. 
3. 	9. 
4. 	10. 
5. 	11. 
6. 	12. 

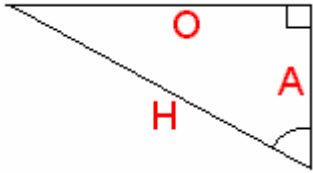
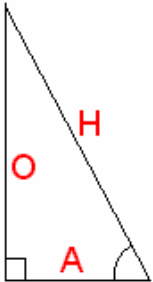
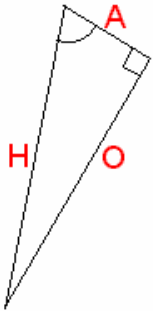
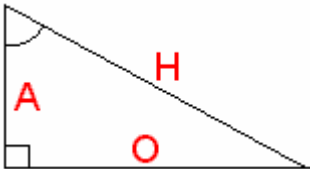
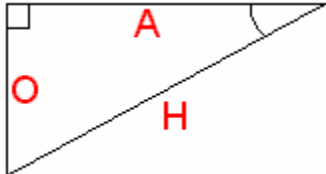
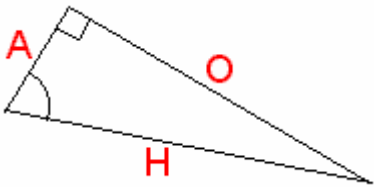
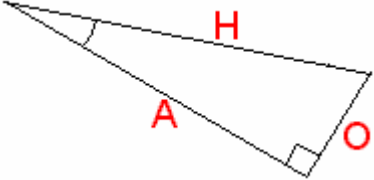
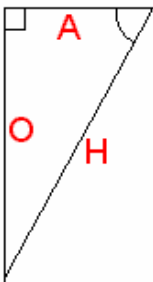
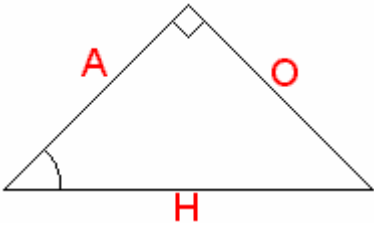
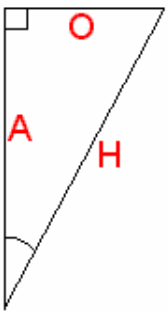
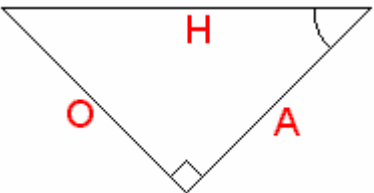
Trigonometry Worksheet T4 – Calculating Angles

Work out the angles labelled. Question 1 requires Sine, question 2 requires Cosine, and question 3 requires Tangent. The rest you will need to work out which to use!

1. 	6. 
2. 	7. 
3. 	8. 
4. 	9. 
5. 	10. 

Trigonometry Worksheet T1 – Labelling Triangles

Label the sides of the triangles below with O for Opposite, A for Adjacent and H for Hypotenuse,

1. 	7. 
2. 	8. 
3. 	9. 
4. 	10. 
5. 	11. 
6. 	12. 

Trigonometry Worksheet T2 – Sine, Cosine & Tangent Values
ANSWERS (to 4 d.p.)

- | | | | |
|----|--------|-----|---------|
| 1. | 0.4226 | 10. | 0.4540 |
| 2. | 0.6018 | 11. | 0.9781 |
| 3. | 0.6745 | 12. | 57.2900 |
| 4. | 0.3746 | 13. | 0.5299 |
| 5. | 0.2588 | 14. | 0.8090 |
| 6. | 8.1443 | 15. | 0.9004 |
| 7. | 0.8387 | 16. | 0.8192 |
| 8. | 0.0175 | 17. | 0.7880 |
| 9. | 0.9657 | 18. | 1.2349 |

Trigonometry Worksheet T3 – Calculating Sides – ANSWERS

1)	$b = 16 \times \sin 35$ $b = 16 \times 0.5736$ $b = 9.18cm$	7)	$j = 8 \times \sin 60$ $j = 8 \times 0.8660$ $j = 6.93km$
2)	$c = \frac{8}{\sin 67}$ $c = \frac{8}{0.9205}$ $c = 8.69m$	8)	$k = 15 \times \cos 79$ $k = 15 \times 0.1908$ $k = 2.86mm$
3)	$d = 25 \times \cos 54$ $d = 25 \times 0.5878$ $d = 14.69km$	9)	$m = 25 \times \tan 33$ $m = 25 \times 0.6494$ $m = 16.24cm$
4)	$e = \frac{7}{\cos 71}$ $e = \frac{7}{0.3256}$ $e = 21.50mm$	10)	$n = 38 \times \sin 23$ $n = 38 \times 0.3907$ $n = 14.85cm$
5)	$f = 5 \times \tan 66$ $f = 5 \times 2.2460$ $f = 11.23cm$	11)	$p = \frac{10}{\cos 48}$ $p = \frac{10}{0.6691}$ $p = 14.94km$
6)	$g = \frac{10}{\tan 27}$ $g = \frac{10}{0.5095}$ $g = 19.63m$	12)	$r = \frac{18}{\cos 43}$ $r = \frac{18}{0.7314}$ $r = 24.61cm$

Trigonometry Worksheet T4 – Calculating Angles - ANSWERS

1. $\sin s = \frac{4}{10}$ $\sin s = 0.4$ $s = \sin^{-1} 0.4$ $s = 23.58^\circ$	6. $\sin b = \frac{5}{8}$ $\sin b = 0.625$ $b = \sin^{-1} 0.625$ $b = 38.68^\circ$
2. $\cos c = \frac{6}{12}$ $\cos c = 0.5$ $c = \cos^{-1} 0.5$ $c = 60^\circ$	7. $\tan z = \frac{24}{7}$ $\tan z = 3.428571429$ $z = \tan^{-1} 3.428571429$ $z = 73.74^\circ$
3. $\tan t = \frac{18}{9}$ $\tan t = 2$ $t = \tan^{-1} 2$ $t = 63.43^\circ$	8. $\tan y = \frac{13}{17}$ $\tan y = 0.764705882$ $y = \tan^{-1} 0.764705882$ $y = 37.41^\circ$
4. $\sin w = \frac{19}{20}$ $\sin w = 0.95$ $w = \sin^{-1} 0.95$ $w = 71.81^\circ$	9. $\cos v = \frac{21}{22}$ $\cos v = 0.954545454$ $v = \cos^{-1} 0.954545454$ $v = 17.34^\circ$
5. $\cos x = \frac{11}{23}$ $\cos x = 0.478260869$ $x = \cos^{-1} 0.478260869$ $x = 61.43^\circ$	10. $\tan u = \frac{16}{15}$ $\tan u = 1.066666667$ $u = \tan^{-1} 1.066666667$ $u = 46.85^\circ$