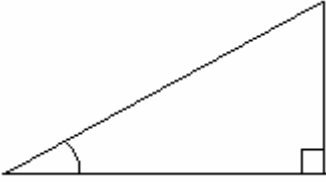
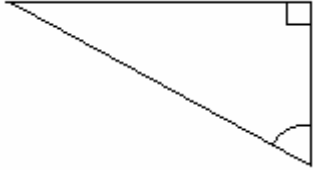
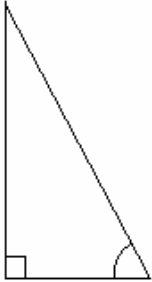
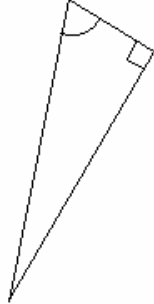
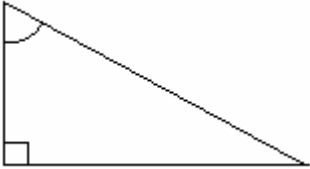
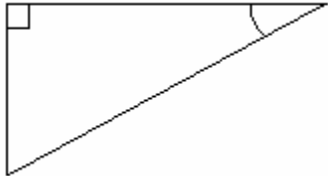
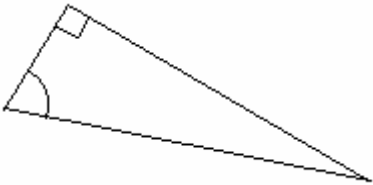
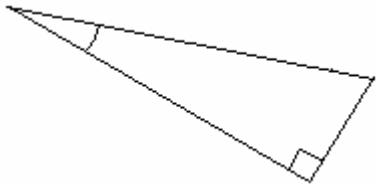
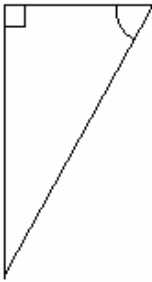
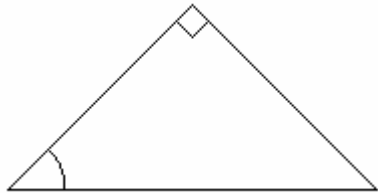
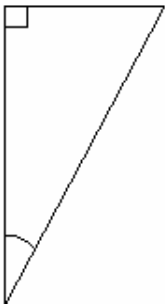
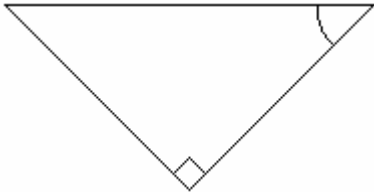


Trigonometry Worksheet T1 – Labelling Triangles

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. 

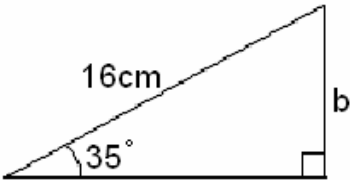
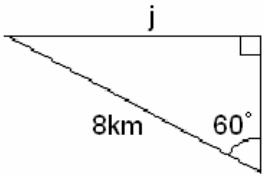
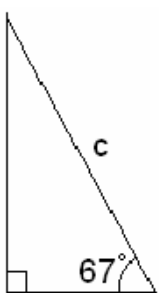
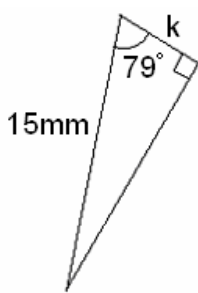

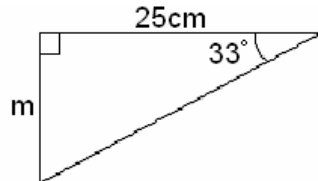
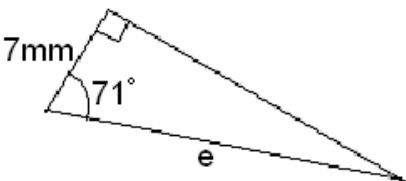
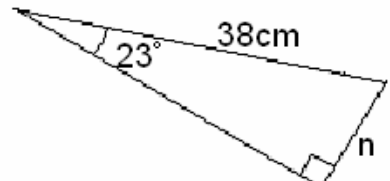
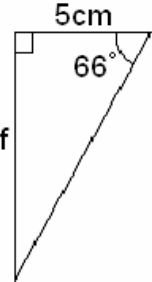
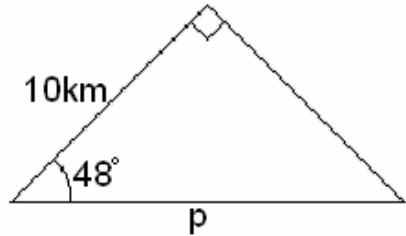
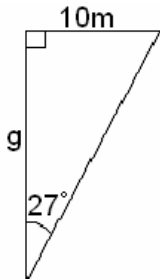
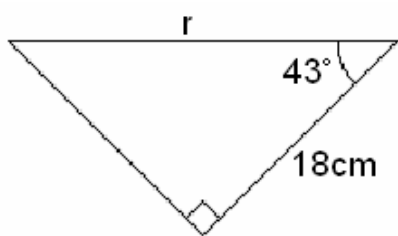
Trigonometry Worksheet T2 – Sine, Cosine & Tangent Values

Give the value of each of the following:

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

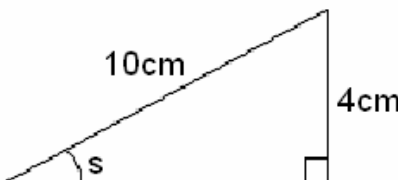
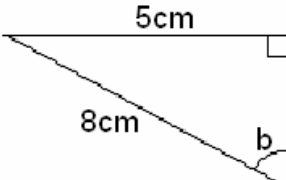
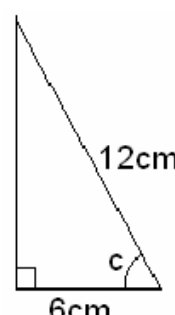

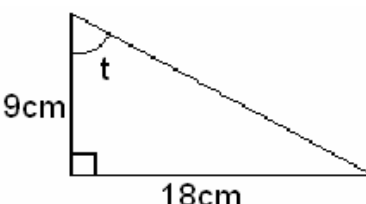
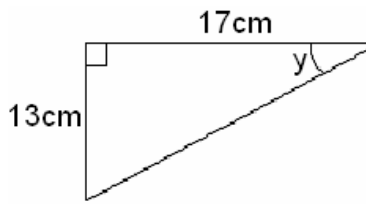
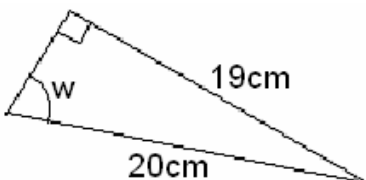
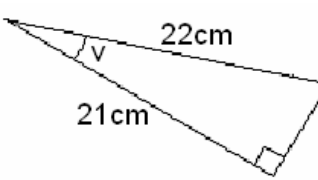

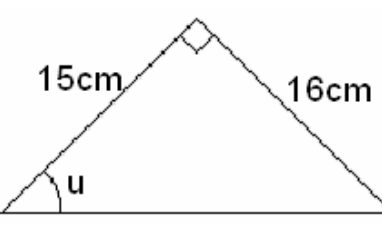
Trigonometry Worksheet T3 – Calculating Sides

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!!)

<p>1.</p> 	<p>7.</p> 
<p>2.</p> 	<p>8.</p> 
<p>3.</p> 	<p>9.</p> 
<p>4.</p> 	<p>10.</p> 
<p>5.</p> 	<p>11.</p> 
<p>6.</p> 	<p>12.</p> 

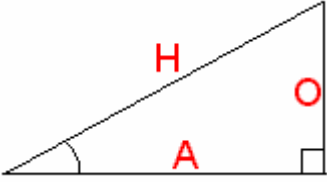
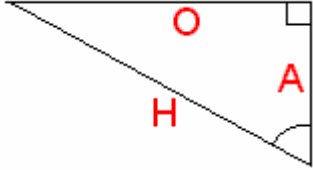
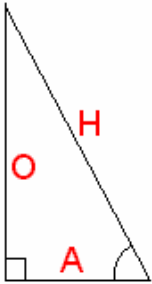
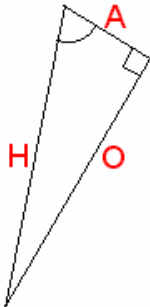
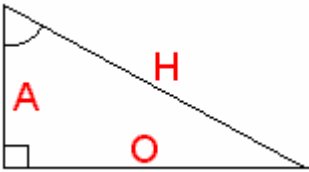
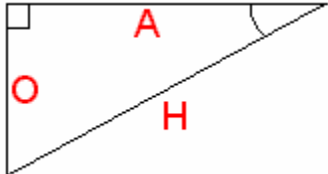
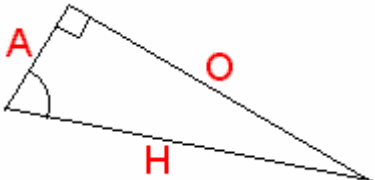
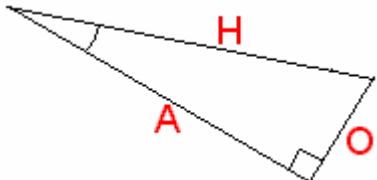
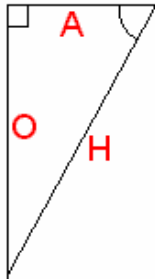
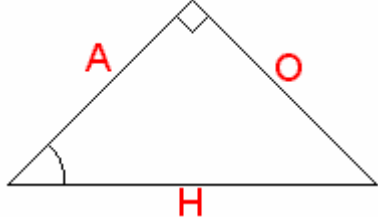
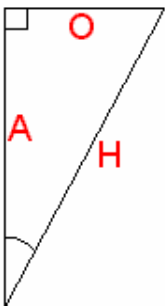
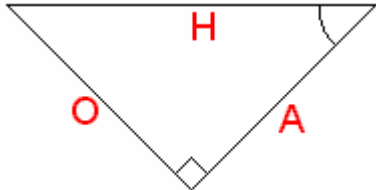
Trigonometry Worksheet T4 – Calculating Angles

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

Trigonometry Worksheet T4 – Calculating Angles - ANSWERS

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