



# Year 10 Maths B Homework Sheet No.19

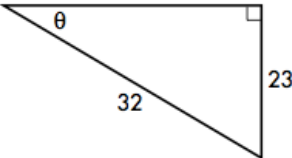
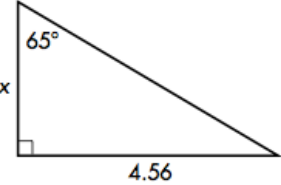
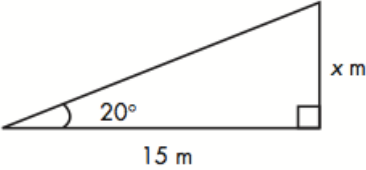
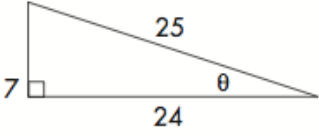
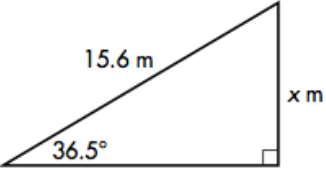
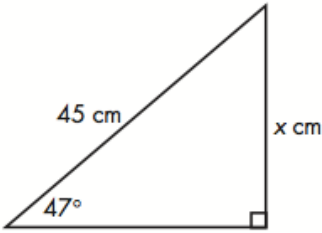
To be completed on loose-leaf paper.  
Show FULL working out.



**Aims:**

- To provide ongoing revision of skills and concepts
- To develop procedural knowledge and fluency.

**Need help? →**

<p>1 Find the following with your calculator.</p> <p>(a) <math>\sin 25^\circ</math> to four decimal places</p> <p>(b) <math>\cos 75^\circ</math> to four decimal places</p> <p>(c) <math>35^\circ 35' 35''</math> in decimal degrees</p> <p>(d) <math>26.83^\circ</math> in degrees, minutes and seconds</p>	<p>2 For each diagram below, write which trigonometric ratio to use to find the unknown.</p> <p>(a) </p> <p>(b) </p>
<p>3 Which trigonometric ratio would you use to find <math>x</math>?</p> 	<p>4 Find the value of <math>\cos \theta</math>.</p> 
<p>5 Find the value of the pronumeral in the triangle correct to two decimal places.</p> 	<p>6 Find the value of <math>x</math>, correct to two decimal places:</p> 
<p>7 A kite is flying at the end of a string so that it makes an angle of <math>48^\circ</math> with the ground. If it is 75 m above the ground, how long is the string, correct to two decimal places? <b>You must draw a diagram showing the measurements given.</b></p>	<p>8 Solve the following linear equations to find the value of <math>x</math>:</p> <p>a) <math>4x + 6 = 14</math></p> <p>b) <math>4x - 5 = 2x + 3</math></p> <p>c) <math>\frac{5x}{2} - 1 = 14</math></p> <p>d) <math>\frac{5x+2}{4} = \frac{11-x}{3}</math></p>

**ANSWERS:** You must show the mathematics used to get these answers. Simply writing the answer is not enough.

Q1-3) No answers given, Q4) 0.96, Q5) 9.28 m, Q6) 32.91 cm, Q7) 100.92 m, Q8) a)  $x=2$ , b)  $x=4$ , c)  $x=6$ , d)  $x=2$ .