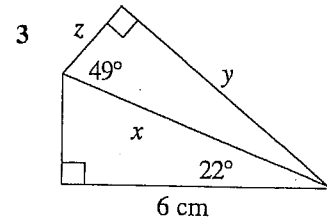
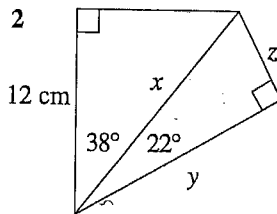
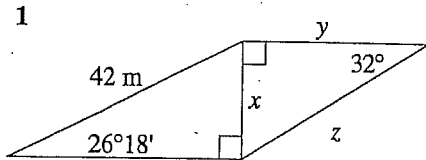


A Trigonometry: Composite figures

Skill 8.7

Find the missing lengths in the following:



B Chance and data: Stem and leaf plots

Skill 9.1

Place the following scores of two players from a junior ten pin bowling team in a back-to-back stem and leaf plot in order to help judge the player of series:

William: (66, 31, 42, 49, 43, 58, 55, 59, 67, 67)

Walter: (40, 69, 68, 21, 32, 33, 41, 52, 53, 57)

C Chance and data: Measures of central tendency

Skill 9.2

- 1 When a number of households were surveyed as to how many litres of milk they use in a week they replied:

{2, 3, 2, 2, 1, 1, 1, 2, 4, 8, 9, 8, 8, 5, 3, 3, 3, 2, 4, 3}

(a) Remove the data from smallest to highest

(b) find the mean value (c) mode value

(d) median value

- 2 In a highway survey, a machine counts the number of cars passing over a bridge on 112 consecutive days. The results are shown in this frequency table. Find the mean number of cars using the bridge each day.

Number of cars	Frequency
12	10
13	15
14	21
15	26
16	30
18	10

D Calculators: Trigonometric functions

Skill 10.8

Determine the following to 4 decimal places:

- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| 1 $\sin 13^\circ 17'$ | 2 $\cos 14^\circ 21'$ | 3 $\tan 13^\circ 14'$ | 4 $\cos 28^\circ 14'$ |
| 5 $\sin 38^\circ 15'$ | 6 $\cos 77^\circ 12'$ | 7 $\tan 13^\circ 14'$ | 8 $\tan 88^\circ 15'$ |
| 9 $\sin 79^\circ 15'$ | 10 $\cos 42^\circ 15'$ | 11 $\sin 19^\circ 12'$ | 12 $\sin 18^\circ 20'$ |
| 13 $\tan 21^\circ 18'$ | 14 $\sin 81^\circ 32'$ | 15 $\cos 86^\circ 14'$ | |

E Calculators: Raising a number to a power

Skill 10.9

Calculate to 3 decimal places:

- | | | | |
|--------------------|-------------------|-------------------|--------------------|
| 1 $4^{-0.3}$ | 2 $5^{0.2}$ | 3 $6^{2.8}$ | 4 $(9.3)^{0.2}$ |
| 5 $(18.2)^{5.2}$ | 6 $(3.8)^{1.8}$ | 7 $(1.08)^{6.3}$ | 8 $(4.2)^{0.8}$ |
| 9 $(6.3)^{1.2}$ | 10 $-(1.4)^{0.6}$ | 11 $(2.81)^{0.4}$ | 12 $(100.2)^{1.2}$ |
| 13 $-(2.04)^{2.6}$ | 14 $(19.2)^{1.5}$ | 15 $(3.8)^{2.7}$ | 16 $(9.02)^{4.2}$ |

Worksheet 35

- A** 1 $x = 18.61$ 2 $x = 15.23$ cm
 $y = 29.78$ m $y = 14.12$ cm
 $z = 35.12$ m $z = 5.70$ cm
- 3 $x = 6.47$ cm
 $y = 4.88$ cm
 $z = 4.25$ cm

B	<i>Walter</i>		<i>William</i>
	1	2	
	2 3	3	1
	0 1	4	2 3 9
	2 3 7	5	5 8 9
	8 9	6	6 7 7

William appears to have higher scores than Walter.

- C** 1 (a) (1, 1, 1, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 5, 8, 8, 8, 9)
 (b) 3.7 (c) 2, 3 (d) 3
- 2 14.8 cars
- D** 1 0.2298 2 0.9688 3 0.2352
 4 0.8810 5 0.6191 6 0.2215
 7 0.2352 8 32.7303 9 0.9825
 10 0.7402 11 0.3289 12 0.3145
 13 0.3899 14 0.9891 15 0.0657
- E** 1 0.660 2 1.380 3 150.947
 4 1.562 5 3 567 559.438 6 11.056
 7 1.624 8 3.152 9 9.104
 10 -1.224 11 1.512 12 251.792
 13 -13.022 14 84.130 15 36.763
 16 10 277.026