Revision & Prac ... Worksheet 29

A Measurement: Area of simple shapes

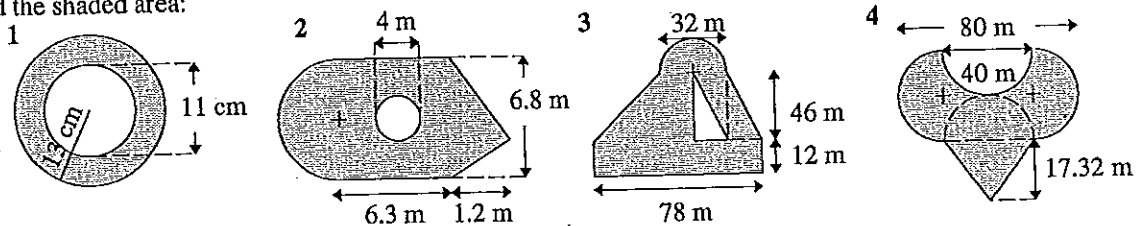**Skill 7.4**

Find the area of these shapes:

1

2

6 m
78°18'

3

4.7 km
6.2 km

4

3 m   5 m
128 cm

5

5 m
130 cm

6

$7\frac{1}{8}$ m

1.8 m
4.2 m
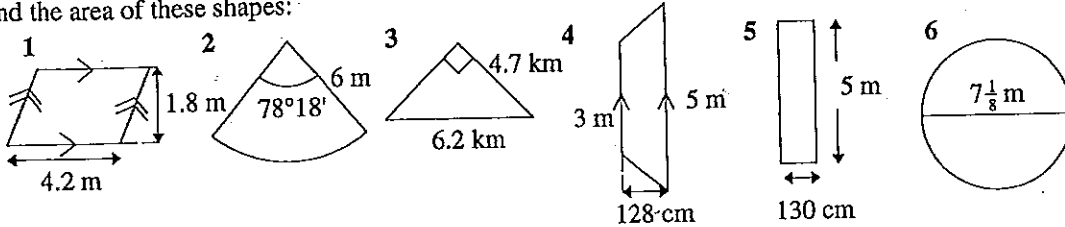
B Measurement: Composite areas

Skill 7.5

Find the shaded area:

1

11 cm

2

4 m
6.8 m
6.3 m   1.2 m

3

32 m
46 m
12 m
78 m

4

← 80 m →
40 m
17.32 m

C Trigonometry: Practical applications in three dimensions

Skill 8.9

1 Find the angle between the planes:
   (a) *ACDF* and *GCDH*
   (b) *AGHF* and *GCDH*
   (c) *IJKL* and *LIEB*
   (d) *AFHG* and *GBEH*

A   B   C
F G E   D
1 m   H
4 m
I   J
K
L   6 m   2 m
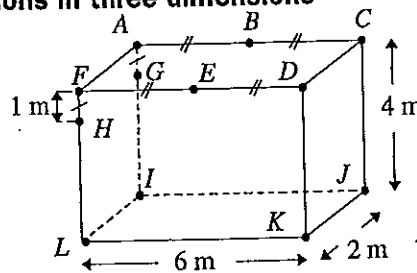
2 Find the angle that the body diagonal
   of this cuboid makes with the faces:
   (a) *EFGH*
   (b) *ABFE*
   (c) *BDGF*

A   B
C   D
12 m
E   F
H   G
← 10 m →   8 m
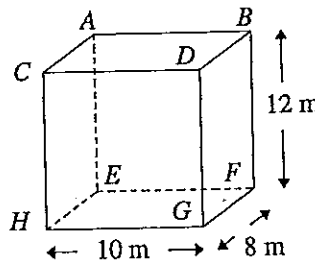
D Trigonometry: Using sin to find side lengths

Skill. 8.1

1 Find the sides:
   (a)

12.5 m
x
19°18'

   (b)

31°12'
16 m
x

   (c)

x
5 m
12°32'

   (d)

38°11'
x
32 m
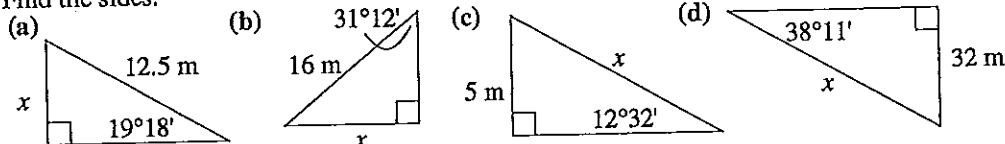
2 A yacht sails 7 km on a bearing S23°W. How far west is it from its starting point?

3 A person sights a ship at sea from the top of a cliff with an angle of depressions of 32°14'.
   If the distance between the person and the ship (hypotenuse of the triangle) is 890 m, find
   how far the ship is from the base of the cliff.

E Chance and data: Interquartile range and box and whisker plots

Skill 9.4

The following figures represent the basketball scores shot by each player in a game:
   Jenny: (4, 8, 8, 10, 11, 12, 14, 14, 20)
   Josie: (1, 5, 5, 7, 9, 10, 21, 13, 16)
Find each person's interquartile range and draw a box and whisker plot for each in order to judge
who should get the sharp shooters prize for the season.

A **1** 7.56 m²   **2** 24.60 m²   **3** 9.635 km²
   4 5.12 m²   **5** 6.5 m²   **6** 39.87 m²

B **1** 435.90 cm²   **2** 52.51 m²   **3** 3500.12 m²
   4 2574.72 m²

C **1** (a) 9.46°   (b) 80.54°   (c) 53.13°
   (d) 71.57°

   2 (a) 43.14°   (b) 27.12°   (c) 34.74°

D **1** (a) 4.13 m   (b) 8.29 m   (c) 23.04 m
   (d) 51.76 m

   2 2.74 km
   (a) 752.84 m

E   Interquartile range:
Jenny 6   Josie 75.
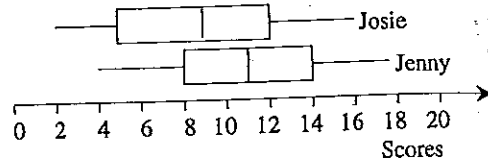
Jenny's scores are generally higher and more consistent (box smaller) than Josie's so Jenny gets the prize.