

Mathematical Literacy 4 - Module 4

Name:

Marks Available: 50

Time: 45 minutes

Question 1:

Choose the correct answer:

1. If an object has a mass of 12kg, it has a weight of
 - a. 12kg
 - b. 50%
 - c. 20%
 - d. 100%
2. 100cm^2 is the same as:
 - a. 1m^2
 - b. 0.1m^2
 - c. 0.01m^2
 - d. 0.01m^2
3. A cylinder with a radius of 5cm and a height of 10cm has a volume of:
 - a. 3141.59cm^3
 - b. 785.40cm^3
 - c. 34145.92cm^3
 - d. 1178cm^3
4. North West on a compass is represented by:
 - a. 45°
 - b. 135°
 - c. 225°
 - d. 315°
5. The surface area of a sphere is:
 - a. The same as the surface area of a cylinder into which it just fits
 - b. The same as the surface area of a cube into which it just fits
 - c. the same as the surface area of the rectangle into which it just fits
 - d. the same as the surface area of the triangle into which it just fits.

[15]

Question 2:

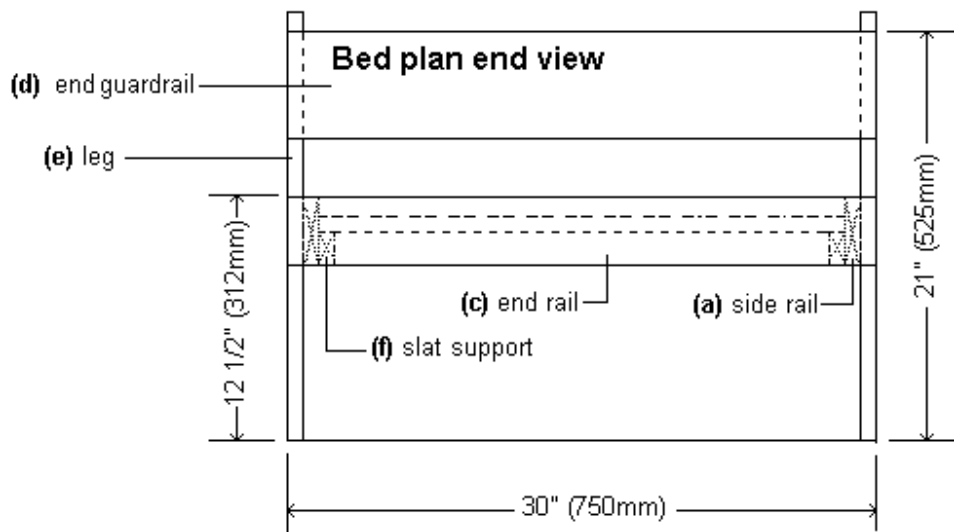
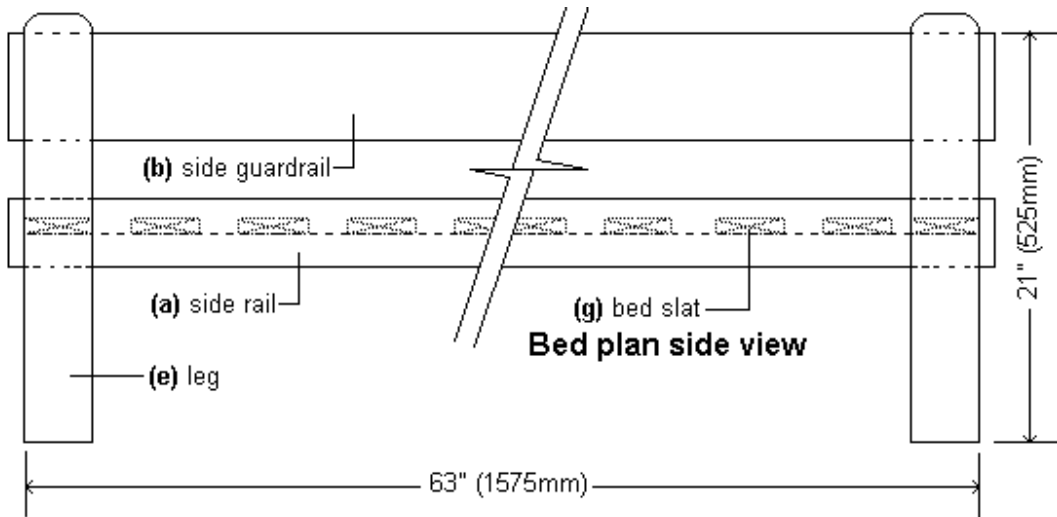
Draw a 2 point perspective drawing of a cube (you can choose your own dimensions).

[5]

Question 3:

Study the diagram for making a bed and answer the questions that follow:





ITEM	DESCRIPTION	STOCK SIZE	LENGTH	HOW MANY PIECES
[a]	side rail	3/4" x 3 1/2" (90mm x 19mm)	63" (1575mm)	2
[b]	side guardrail	3/4" x 5 1/2" (140mm x 19mm)	63" (1575mm)	1
[c]	end rail	3/4" x 3 1/2" (90mm x 19mm)	30" (750mm)	2
[d]	end guardrail	3/4" x 5 1/2" (140mm x 19mm)	30" (750mm)	2
[e]	leg	3/4" x 3 1/2" (90mm x 19mm)	22" (550mm)	4
[f]	bed slat support	3/4" x 1 1/2" (40mm x 19mm)	63" (1575mm)	2
[g]	bed slat	3/4" x 3 1/2" (90mm x 19mm)	27" (675mm)	12

1. Draw up an order for the amount of wood you will need, assuming that it comes in boards of 2m long. (4)

2. What would be the dimensions of the mattress to fit the bed? (4)

3. What is the area of the mattress? (2)

4. Wood is priced by the following formula:

Length x width x thickness x price x VAT

Assuming the price per cubic metre of wood to be R5000, what would you expect to pay for the wood? (6)

[16]

Question 4:

Study the routemap and answer the questions that follow:

1. How far is it from Cape Town to Bloemfontein? (2)

2. Assuming that you get 400km from a tank of petrol, where might you plan to stop for petrol? (4)

3. If you drive at an average of 100km/h and stop for two hours for petrol and meals, how long will the trip take you? (4)

4. Assuming that petrol costs R6,92 / litre and you get 8l/100km, how much is the trip likely to cost you? (4)

[14]

BLOEMFONTEIN TO CAPE TOWN

