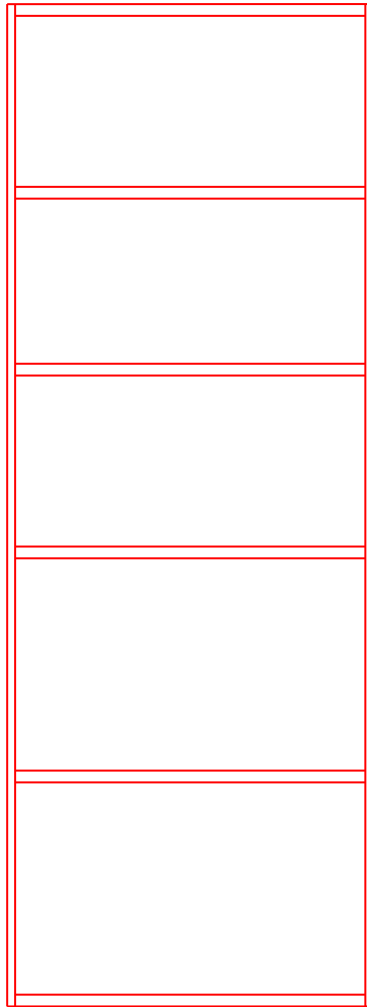Sample Solutions

1. a)   Scale 1:10 ✓

   Drawing ✓✓✓

   (4 Marks)

These Diagrams are not drawn to scale – please use correct scale for your submission

1. b)

2 x sides ✓
Pine
1830 x 300
x 20 mm ✓
Shape ✓

1 x back 3 ply ✓
1830 x 920 x 3mm ✓
Shape ✓

6 x shelves ✓
pine
880 x 300
x 20mm ✓
Shape ✓
(9 Marks)

2. a) 2 x ████   + 6 x ██▉   ✓
        = █▉   +   ██▉   ✓
        = ██▉ mm of Pine   (or ███) ✓

   b)   ███ x 920 = █████ mm² of 3 ply   (or ██▉ m²) ✓✓✓

                                          (6 Marks)

3.   Cutting → Gluing → Screwing → Tacking the Back → Spray → Dry
     → Spray → Dry → Spray → Dry → Finish.   ✓✓✓

                                          (3 Marks)

4. a)   █▉ lengths per unit
         or █ lengths for 3 units ✓✓

   b)   Total waste for 3 units ███ mm ✓✓

   c)   Cost for 3 units
             = █ x $42.90 = $ ████ ✓✓
         Cost for 1 unit
             = $ ██▉ ÷ 3 = $ █████ ✓

3m

1830mm

880mm

880mm   880mm   880mm

290mm   360mm
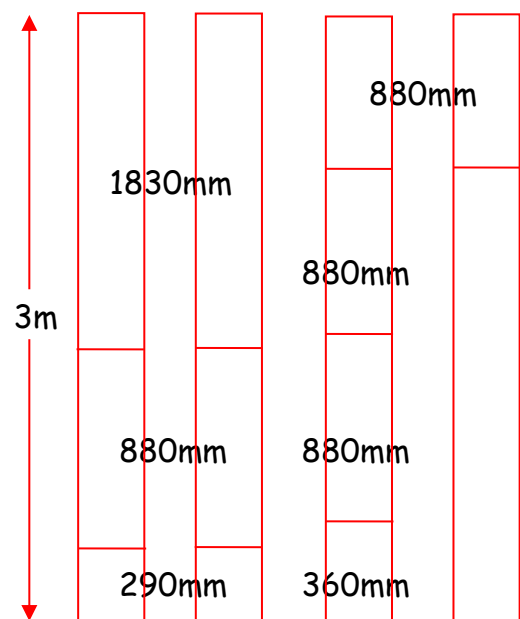
                                          (7 Marks)

5.   Total cost for 1 unit.

   Pine   =   = $143.00
   3 ply   =   = $11.45 ✓
   Paint   = ████████ @ $30/l = █ x $30 = $ ███
   Thinners   = ████████ @ $ █▉ /l = █ x $ ██▉ = $ ███   ✓
   Woodglue   = ██████ @ $15/l = █▉ x $15 = $ ███   ✓
   Wood screws = ████ x $ ███   = $1.08 ✓
   Tacks   = ███▉ x $12   = ████
                          Total   = $ ████   ✓

                                          (5 Marks)

6.   Total time for 1 unit

        Mark and cut   = ▮ = ▮ min ✓

        Glue, screw together & tack back = ▮ min ✓

        Spraying   = ▮ = ▮ min ✓

               Total time = ▮ min ✓

                    = ▮ min

                    (4 Marks)

7.   Labour cost ▮ hrs × \$50 ✓

               = \$▮ ✓

               (2 Marks)

8.   Total Cost is   \$▮ + \$▮ = \$▮ ✓

    Charge per Bookcase   = \$▮ + 15%

                    = \$▮ + \$▮ ✓

                    = \$▮ ✓

                    ≈ \$▮

               (3 Marks)

9.   7.30pm → 4pm = ▮

        less: 25 min, 45 min & 20 min = ▮ ✓

        Total hours worked per day   = ▮ = ▮ hrs ✓

        Time worked in 12 days   = ▮ = ▮ hrs ✓

        Time required to make 40   = ▮ = ▮ hrs ✓

        Overtime Roemi needs to do = ▮ = ▮ hrs ✓

                    (5 Marks)

10.   Profit   = (\$326 - \$▮) × 40

             = \$▮ × 40 ✓

             = \$▮ ✓

               (2 Marks)

                  <u>Total Marks   (50 Marks)</u>