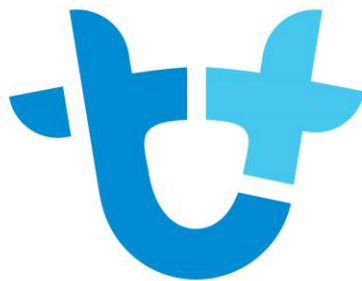


*AuctionsPlus Pty Limited*

***SHEEP ASSESSMENT MANUAL***

*Effective October 2015*



**AuctionsPlus**

*Buy and Sell stock nationally*



## TABLE OF CONTENTS

### **PART A: ASSESSMENT TECHNIQUES**

A1 – Assessment Options.....	1
A2 – Assessing Fat Thickness.....	2
A3 – Liveweight.....	8
A4 – Dressing percentage.....	12
A5 – Assessing dentition.....	17
A6 – Skin assessment.....	18

### **PART B: ASSESSOR COMMENTS – SLAUGHTER STOCK**

B1 – Stock categories.....	23
B2 – Carcase quality grade.....	24
B3 – Assessor comments.....	25

### **Part C: Assessor Comments – Store Stock**

C1 – Stock categories.....	27
C2 – Breeding quality.....	28
C3 – Condition.....	29
C4 – Growth.....	30
C5 – Pregnancy terminology.....	31
C6 – Frame.....	32
C7 – Wrinkle.....	33

### **Part D: Group Assessment**

D1 – Group Assessment.....	34
----------------------------	----

### **Part F: Scoring Assessments**

F1 – Dressed weight.....	36
F2 – Fat assessment.....	37
F3 – Skin assessment.....	39
F4 – Assessor comment.....	40
F5 – General description.....	41
F6 – Summary results.....	42

### **Part G: Parameters for elevation and relegation of AuctionsPlus assessors**

G1 - A3.....	43
G2 - A3 to A2.....	43
G3 - A2 to A1.....	43
<i>(Note: as of January 2016 there will be additional requirements for maintaining accreditation levels.)</i> .....	43
G4 - Maintaining Assessor Level.....	43

### **Part H: Lamb marketing**

H1 – Market specifications.....	44
---------------------------------	----

### **Part I: Mutton marketing**

I1 – Mutton Marketing.....	45
----------------------------	----

### **Part J: Why buyers complain**

J1 – Why buyers complain.....	47
-------------------------------	----

### **APPENDIX 1**

Standard AusMeat Carcase Weights.....	49
Standard Liveweights.....	49

## **PART A: ASSESSMENT TECHNIQUES**

### **A1 – Assessment Options**

Two assessment options are available on AuctionsPlus:

- **INDIVIDUAL**, where the mob (or sample) are weighed on farm and manually assessed for fat, muscle, dentition etc. This is the most accurate method, giving a high degree of credibility with buyers.
- **GROUP** assessments, where the mob may not necessarily be weighed (though a sample may be), and are visually assessed for fat, muscle etc. Suitable for lines that will be drafted to specification at delivery.

The choice of assessing technique is up to the owner and assessor, and of course depends on prevailing conditions.

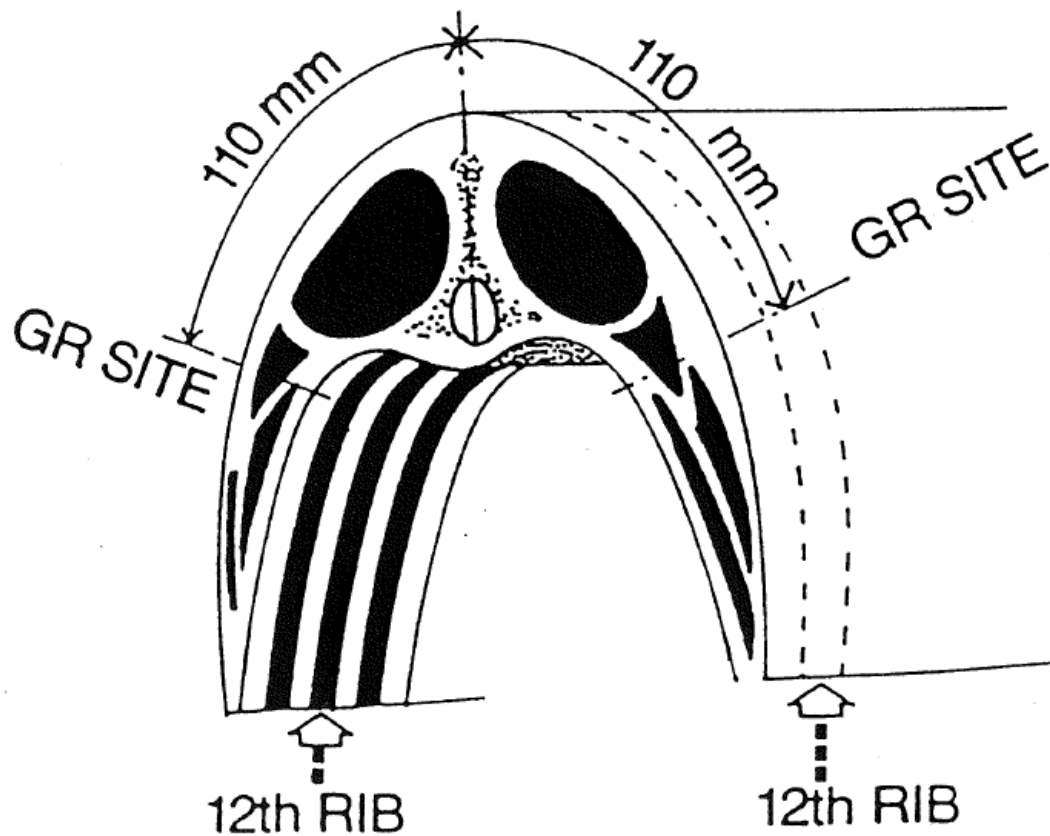
## A2 – Assessing Fat Thickness

There are five AusMeat fat scores that are used in AuctionsPlus descriptions.

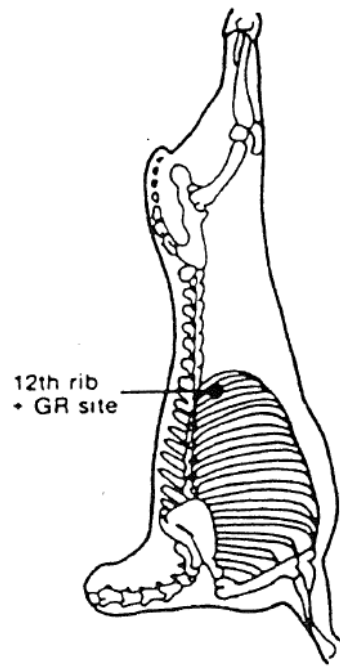
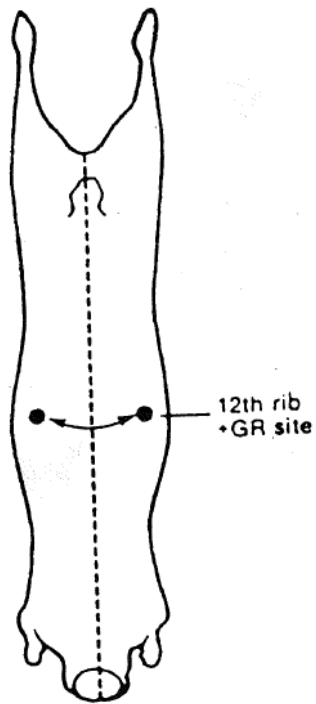
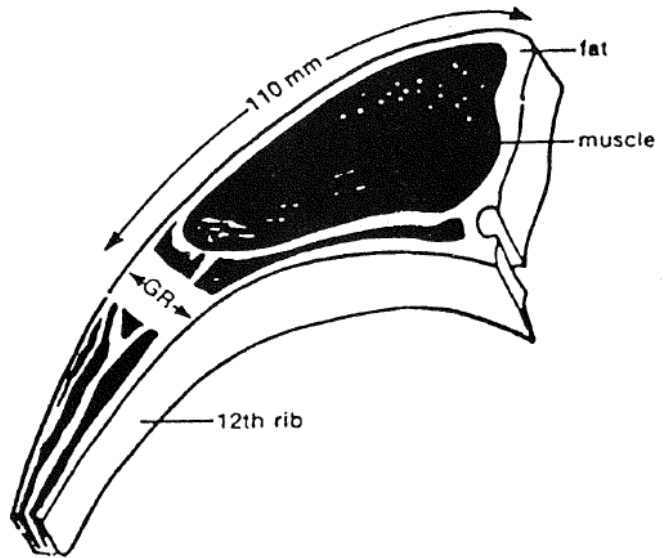
Score	Millimetres
1	Up to 5
2	Over 5 and up to 10
3	Over 10 and up to 15
4	Over 15 and up to 20
5	Over 20

The point where fat is measured is the GR site, which is 110 mm from the carcass mid-line over the 12th rib.

### GR measurement site



Score ranges are defined on the carcass by using the total depth of tissue at what is known as the GR site.



# FAT CLASS



**CLASS 1**



GR  
Up to 5mm



**CLASS 2**



GR  
Over 5mm  
up to 10mm



**CLASS 3**



GR  
Over 10mm  
up to 15mm



**CLASS 4**



GR  
Over 15mm  
up to 20mm



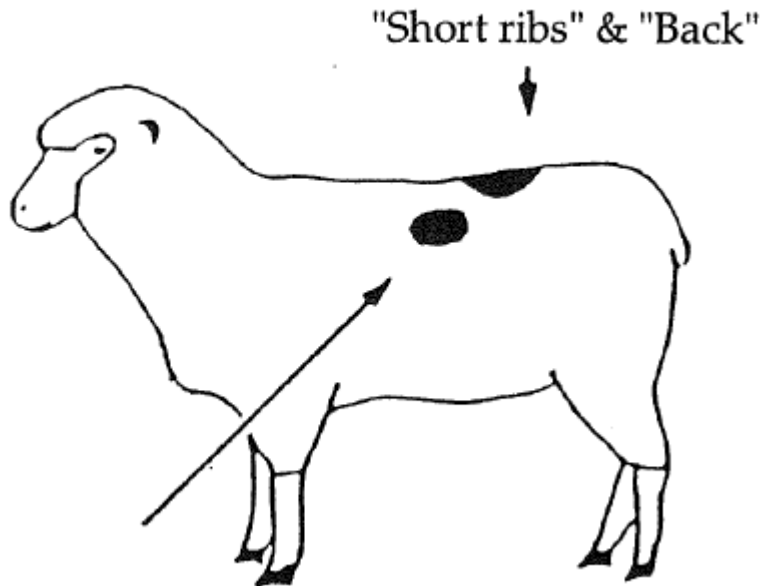
**CLASS 5**



GR  
Over 20mm

### Manual fat assessing

Three of the main areas to handle sheep/lambs are the short ribs of the loin, over the top of the backbone and the long ribs at the GR site.



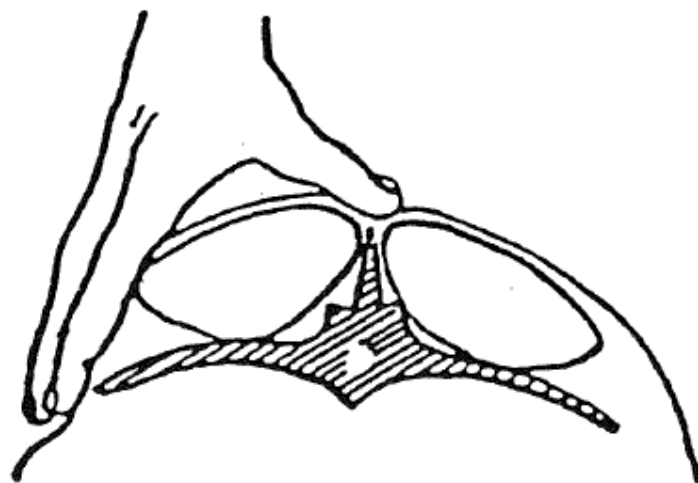
The GR site is approximately 110 mm (4") from the centre of the backbone. Feel the last two or three "long ribs".

### Ends of short loin ribs

A good indication of fat cover can be obtained by placing the thumb on the top of the backbone and fingers over the ends of the short loin ribs.

Move hands towards the animal's head and tail, feeling the amount of fat over the backbone and ends of the short ribs.

**Move fingers through the wool to get onto the skin. Use tips or balls of the fingers.**





### Top of the backbone

The area to feel is the top of the backbone in the short loin area.

Can be felt with the thumb at the same time as the fingers are feeling the tips of the short loin ribs.

### Long rib

This is another excellent point to fat score.

Feel over the area where the GR measurement would be taken on the carcass.

### Tail

**Feeling the tail is a much less reliable method of assessing fat cover.**

Fat is often deposited over the tail in an irregular manner and can be a poor guide to carcass fatness.

### What to feel for on live animals

<u>Fat Score</u>	1	2	3	4	5
GR site Tissue depth <u>mm</u>	0-5	6-10	11-15	16-20	21 and above
<b>Fat indicator reference points</b>					
<b>Short rib</b>	Ends of short ribs very prominent. It is easy to feel between them.	Ends of short ribs are rounded. It is still possible to feel between them.	Ends of short ribs are well rounded. It is not possible to press between them.	Only one or two of the bone ends may be felt and those will be located nearest the rib cage.	It is very difficult to feel the bone ends.
<b>Long ribs</b>	Individual ribs felt very easily. Cannot feel any tissue over the ribs.	Individual ribs easily felt but some tissue present.	Individual ribs can still be felt but can feel tissue.	Can just feel ribs and fluid movement of tissue.	Ribs barely felt and tissue movement very fluid.
<b>Backbone</b>	Bones are raised and sharp. It is easy to feel between them.	Bones are raised and the ends are rounded. It is still possible to feel between them.	Bones slightly raised. It is possible to feel them, but not between them.	Some bone ends may still be felt. Skin begins to float as on liquid.	Backbone may be recessed in the fat and difficult to feel.

**NOTE:** Assessing fat scores “over the fence” without handling the lambs can be very misleading.

For successful fat scoring, the lamb must be standing in a relaxed state, preferably in a race, small pen or the liveweight scales.

The animal will not be bruised if assessed in the correct manner.

### Guidelines – lambs

<b>Fat Score</b>	<b>Comment</b>	<b>Description</b>
1	Store condition only – may suit some export orders.	Very lean
2	Generally suit all markets depending on muscling.	Lean
3	Very acceptable fat cover for most operators.	Prime
4	Tends to be overfat for most operators. In the past, suited many local butchers. Suitable for many boning and export orders.	Fat
5	Overfat and wasteful to most operators (usually prevalent in very well finished lambs or lambs poorly bred but on good nutrition).	Very fat

### Guidelines – sheep

<b>Fat Score</b>	<b>Comment</b>	<b>Description</b>
1	Usually regarded as plain or canner types, although carcasses measuring high 1 score (4-5 mm) are often very useful boners.	Very lean
2	Generally good boners with an increasing percentage being used for local trade demand.	Lean
3	Good boners for most local and export packs, along with local trade.	Prime
4	Tending to be fat, however following trimming, usually regarded as good boning quality.	Fat
5	Regarded by majority of operators as overfat, requiring heavy trimming prior to boning.	Very fat

**NOTE:** Fat is only one of the determinants of quality or market suitability. Weight, shape, breed, freshness etc must also be kept in mind.

### **A3 – Liveweight**

Liveweighting should be carried out using electronic type scales that are properly tested prior to each lot being assessed. The scales should also be checked several times during weighing.

Assessors should record weights of a fair average lot sample. AuctionsPlus recommends a minimum of 20% or 100 head to be sampled, whichever is greater. The larger the sample, the more accurate the assessment, which will improve buyer confidence.

**NOTE:** Accurate liveweights will ensure more accurate dressed weight estimates. Make sure the mob weighed is a random sample – not the lead or tail of the mob.

#### **Factors affecting growth rates**

In providing guidelines for estimating liveweight gain/loss, many factors are involved.

The most important of these are genetic, environmental and managerial.

Accordingly it is not possible to provide a general formula for all situations.

The following guidelines (Tables 1 and 2) are only provided to assist in the estimation of liveweight gains on prime lambs.

However, the use of these guidelines depends largely on assessor experience and common sense in determining which factors are more important than others.

### Breed Differences

There are fast and slow growers in all breeds and as a first step to estimating liveweight gains, the following table provides approximate differences to expect when the most common prime lamb breeds are compared to the most popular prime lamb cross, Dorset/Poll Dorset X Border Leicester/Merino.

**Table 1**

<b>Sire</b>		<b>Dam</b>	<b>Growth Rate %</b>	<b>Comparative daily gain (grams)*</b>
Poll Dorset	X	BL/Merino	100%	180
Dorset	X	BL/Merino	100%	180
Border Leicester	X	Merino	89%	160
Dorset Horn	X	Merino	92%	165
Poll Dorset	X	Merino	92%	165
Suffolk	X	Merino	92%	165
Ryeland	X	BL/Merino	95%	171
Southdown	X	BL/Merino	95%	171
Suffolk	X	BL/Merino	100%	180
Dorset Horn	X	Corriedale	96%	173
Poll Dorset	X	Corriedale	96%	173
Suffolk	X	Corriedale	96%	173
Dorset Horn	X	Polwarth	91%	164
Poll Dorset	X	Polwarth	91%	164
Suffolk	X	Polwarth	91%	164
Coopworth	X	Coopworth	90%	162
Corriedale	X	Corriedale	81%	146
Drysdale	X	Drysdale	83%	150
Gromark	X	Gromark	90%	162
Merino	X	Merino	71%	128
Polwarth	X	Polwarth	71%	128
Romney	X	Romney	83%	150
Tukidale	X	Tukidale	83%	150

\*These are the growth rates expected under good conditions – not the best or the worst.

Also, some of the more recent sheep breed imports, for example the Texel, may have greater growth rates of about 104%.

## Nutrition

Having established the approximate differences in growth rates between breed types, table 2 compares the effects of quality and quantity of feed types.

**NOTE:** As with Table 1, all figures are guidelines only and relate to Dorset/Poll Dorset X Border Leicester/Merino lambs.

**Table 2**

Weight gain grams per day	Feed Conditions		
	Pastures	Fodder Crops (Oats, Barley, Field Peas, Millet etc)	Feedlot
<b>300 grams per day</b>	High legume content (lucerne, clovers, early maturity, green rapid growth). Short dense (50-150 mm). Low to moderate stocking rates.	High nitrogen content. Green, early maturity, fast growth. Dense short height 150-200 mm. Low to moderate stocking rate.	Edible protein, at least 14-15% high grain content, roughage 15-20%, consumption at least 3% of liveweight.
<b>200 grams per day</b>	Less legumes early to mid maturity, slower plant growth, still green, less dense. Height either less than 50mm or 150-300 mm and higher. Average stocking rate.	Cereals, green, mid maturity, fast growth, 200-300 mm in height, dense. Heavier stocking rate.	Edible protein 12-15% good balanced ration, 75% grain, 25% roughage, consumption 2.5-3% of liveweight.
<b>100 grams per day</b>	Low legume content, haying off, less green material, less density 150-450 mm in height. Higher stocking rates.	Cereals, slower plant growth, dense mature thicker stems over 300 mm in height. Heavier stocking rate.	Edible protein under 12-13%, higher roughage content, consumption under 2.5% of liveweight.
<b>Maintenance + or - 0</b>	As for 100 grams per day but lower quantity and quality.	As for 100 grams per day but not as good.	As for 100 grams per day but not as good.

See the following examples of calculating/estimating weight gains using Tables 1 and 2.

### Example 1

If a Dorset X BL Merino lamb is growing at 180 grams per day, then a first cross BL X Merino lamb of the same sex on similar pasture should be growing at approximately 160 grams per days (89% of 180).

### Example 2

If Dorset X BL/Merino lambs are growing at 300 grams per day (very fast), then purebred Corriedale lambs on similar feed conditions should be growing at around 243 grams per days (81% of 300).

## **Management**

In making decisions on liveweight gains, the following eight factors are worth consideration.

- **Age and weight – lambs**

Fresh, young sucker lambs will grow faster provided feed is not limited.

- **Weaning**

Most lambs will suffer a check for the first two to three weeks after weaning.

Pasture/feed quality is the critical factor, with protein content being the most important.

Lambs weaned onto young, fast growing crops or clover dominant pastures should not suffer a check at all.

- **Stocking rate**

Stocking rate has an obvious effect on food consumption.

- **Grass Seeds**

Grass seeds will severely retard growth.

If heavily infested, penetration is evident.

- **Shearing**

In general, shorn stock have higher feed intakes and may have faster weight gains. Shearing in cold weather can retard gains.

- **Sex**

Rams and cryptorchids will grow approximately 10 to 15% faster than wether lambs, provided feed is unlimited.

Ewe lambs will normally be approximately 10 to 15% slower than wethers.

- **Set stocking**

Set stocked lambs normally grow faster than lambs subjected to regular paddock changes and differences in feed type (provided of course that feed is adequate and disease is not a problem).

- **Disease**

Worms, liver fluke and any external parasite problem will retard growth, as will flystrike, footrot and any other health problem.

#### **A4 – Dressing percentage**

Dressing percentage plays two important roles in AuctionsPlus:

- It is used to calculate carcass weight from a known or estimated liveweight
- It is also used to convert liveweight bids and dressed weight bids back to an equivalent basis

**\*\*\* All assessments must have a dressing percentage regardless of whether they are store or slaughter stock. \*\*\***

Dressing percentage estimates need to be determined and provided at the time of assessment, along with an estimate of any daily liveweight gain or loss.

Assessors should give careful consideration when providing this information as all bidding relates to projected weights.

Dressing percentage is simply carcass weight as a percentage of liveweight.

$$\text{Dressing percentage} = \frac{\text{carcass weight} \times 100}{\text{liveweight}}$$

Carcass weight can be found by multiplying liveweight by dressing percentage.

$$\text{Carcass weight} = \text{liveweight} \times \text{dressing percentage}$$

To calculate the dressing percentage from the carcass weight and liveweight, divide the carcass weight by the liveweight and express in percentage terms.

$$\text{Carcass weight} \div \text{liveweight} = \text{dressing percentage}$$

For example, 21.5 kg HSCW  $\div$  58.4 kg lwt = 42.9%

(The term “yield” is at times used instead of dressing percentage. This can be confused with the yield of meat from a carcass. On AuctionsPlus, only use the term dressing percentage when relating to carcass weight as a percentage of liveweight).

On AuctionsPlus, liveweight is measured at assessment and carcass weight at some later date.

This period between the two measurements will alter according to the availability of sheep, transport etc.

The actual dressing percentage does not vary in the short term, so long as the number of hours off feed and water remains constant ie live (and dressed) weights may be rising or falling, but dressing percentage is constant.

AuctionsPlus has standardised the estimated dressed weight to the first date nominated for delivery on the assessment.

To allow the computer to make this calculation, assessors must provide estimates of liveweight gain or loss and dressing percentage.

The dressing percentage estimate assumes that sheep would be slaughtered shortly after weighing.

Thus in the following example, sheep have been assessed individually on 01/01/2006 for sale on 05/01/2006.

The dressing percentage has been estimated to 45% and the stock are estimated to be gaining 0.05 kg per day. The first date nominated for delivery is 10/01/2006.

The computer will project the live and dressed weights forward to 10/01/2006.

Example 1:					
LWT	(01/01/06)	46.0KG	DR% 45.0	PROJ LWT	(10/01/06) 46.4KG
EST DWT	(01/01/06)	20.7KG	DR% 45.0	PROJ DWT	(10/01/06) 20.8KG

### **Liveweight delivery adjustment percentage**

Whenever possible, the curfew at the delivery scales should be the same as at assessment.

If there has to be a difference, it is essential that the assessor estimate the percentage of liveweight which will be lost or gained.

If this is not done, the comparison of live and dressed weight bids will not be accurate.

Using the figures from example 1, and assuming stock were weighed live one hour off feed/water at assessment with live weighing at delivery to be done 12 hours off feed/water, the estimate of liveweight difference due to 11 hours off feed/water is 5%.

Example 2:					
LWT	(01/01/06)	46.0KG	EST LWT	(10/01/06)	44.0KG
PROJ DWT	(06/01/06)	20.8KG	PROJ DWT	(10/01/06)	20.8KG

As you can see, the carcass weight has not changed from 20.8 kg – only the projected liveweight has been affected, firstly by the gain of 0.05kg per day for 8 days, and secondly by the 5% allowed for the gutfill difference between one hour (at assessment) and 12 hours (at delivery) off feed/water.

### **Liveweight gain or loss**

The estimated liveweight at delivery does not include a weight gain or loss for the day of assessment or the first date of the delivery period.

*Any sheep offered on a liveweight basis must have a liveweight gain or loss entered in the assessment.*

### **Comparison of Liveweight and Dressed Weight Bids**

All prices on AuctionsPlus are displayed on the main auction screen in \$ per head. The price a dressed weight bidder sees is calculated by dividing the \$ per head price by the projected dressed weight. A liveweight bidder on the same lot will see a price that is calculated by dividing the \$ per head price by the projected liveweight.

Thus, using the above figures (Example 2), with a current \$ per head price of \$52.00, the dressed weight bidder would see a current price of 250c (\$52.00 divided by 20.8 kg). The liveweight bidder would see a price of 118c (\$52.00 divided by 44.0 kg).



### Determining dressing percentage estimates

When determining dressing percentage estimates, the following are the major factors to consider:

- Liveweight
- Time off feed and water prior to live weighing
- Fat cover
- Skin weight
  - Wool length (unshorn, shorn)
  - Wool (wet/dry)
- Grazing conditions - prior to and after liveweighing
- Unweaned / weaned
- Sex
- Breed

### Liveweight

Dressing percentages are generally slightly higher for sheep/lambs marketed at heavier weights.

### Time off feed and water prior to weighing

Most sheep/lambs are weighed directly off feed or very soon afterwards.

It is necessary to adjust the estimated dressing percentage for the time off feed prior to weighing.

This adjustment will vary between drafts; however the table below provides general guidelines on percentage liveweight loss when related to time off feed and water.

<b>Time off feed (hours)</b>	<b>Approx Cumulative % liveweight loss</b>	<b>Approx effect on dressing %</b>
3	0	0
6	3	0.5
12	5	1
24	7.5	2
48	10.5	3
72	12.0	4
96	14.0	5

**Note:** These are approximate figures and will vary under different locations and conditions.

The longer the fattening period prior to liveweighing, the higher the adjustment to final dressing percentage estimates.

The rate of gut fill loss is greatest in the first 12 hours off feed, being about two to three kilograms.

Weight loss is affected by both time off feed and feed type.

### Fat Cover

Fatter sheep and lambs have a higher dressing percentage than leaner types.

Therefore, fat scoring prior to marketing not only provides as assessment of carcass fat score, but also assists assessors in arriving at dressing percentage estimates.

As a rule of thumb guide, dressing percentages will increase approximately 2% for each increase in fat score ie if a 1 score type is estimated at 40%, 3 score types in the same lot should be estimated at 44% and 5 score types at 48%.

### **Skin weight**

Skin weight influences liveweight and therefore the dressing percentage.

Freshly shorn sheep/lambs with a low skin weight will have a higher dressing percentage than woolly types.

Sheep and lambs carrying 75mm wool length, just too wet to shear, hold approximately 0.2 to 0.5kg of water.

Liveweight of sheep/lambs thoroughly saturated could be from 1.5 to 2kg heavier than similar dry types.

In sheep there are significant differences between, for example a 2" light cutting sheep and a heavy skinned and wrinkled heavy cutting sheep.

Watch for heavy cutting sheep in low condition, especially in dry times, on poor feed and with lambs at foot.

### **Grazing conditions**

Assessors should be aware of pre-assessment feed conditions and should clearly define post-assessment feed conditions as both will have distinct effects on applied dressing percentages.

**Note:** Lambs offered as suckers must remain with mothers until delivery.

### **Unweaned/weaned lambs**

As a general rule, unweaned (fresh sucker) lambs grazing on good pasture conditions will have a dressing percentage approximately 1% to 1.5% higher than weaned lambs of the same age grazing in similar conditions.

First cross, Bond and Merino lambs can dress 2% less.

In drier suckers and weaned lambs, there is no difference and they could even dress lower.

### **Sex**

Ewe lambs tend to be fatter and therefore dress more than wether lambs.

Rams will have a lower dressing percentage than ewes and wethers at most slaughter weights.

This difference is due in part to the lower fat content of ram carcasses and also to the extra weight of the testes and horns at the live weighing.

**Note:** Dressing percentages of adult sheep are often adversely affected by trimming for carcass damage caused by seed penetration, disease condemnations and other trim factors.

### **Breed**

Breed can have an effect on dressing percentage in lambs.

From an experiment conducted at the Temora Research Station, lambs sired by Dorset Horn rams had a dressing percentage 1.5% units higher than lambs which were the progeny of Border Leicester rams, which in turn had a dressing percentage 2% higher than lambs which were the progeny of Merino rams.

### AuctionsPlus dressing percentage guide

The following table provides guidelines for calculation dressing percentage. These guidelines are based on **accurate** fat scoring and refer to sheep/lambs around three hours off feed, with sheep and old lambs bare shorn (weaned second cross lambs, 2 inch skin).

**Note:** These figures do not allow for:

- Extended curfew periods
- Fast growing sucker lambs (add 1 to 1.5%)
- Wool weight
- Wet sheep/lambs
- Outstanding/excellent feed conditions
- Very poor conditioned stock
- Exceptional quality lines of prime of large frame stock

Fat Score	Dressing % Guidelines		
	Weaned 2 <sup>nd</sup> X Lambs	Ewes	Wethers
1	41%	37%	38%
2	43%	39%	40%
3	45%	41%	42%
4	47%	43%	43.5%
5	49%	44%	44.5%

Having completed live fat assessment using the above table, the following examples demonstrate the method of calculating the average dressing percentage of the lot.

#### Example 1 – Lambs Assessed Fat

Score	Estimates % as assessed	Dressing %
2	= 17% X	43% = 731
3	= 68% X	45% = 3060
4	= 12% X	47% = 564
5	= 3% X	49% = 147
	100%	Total 4502 ÷ 100 = average dressing % estimate of 45.02%

#### Example 1 – Ewes Assessed Fat

Score	Estimates % as assessed	Dressing %
1	= 21% X	37% = 777
2	= 48% X	39% = 1872
3	= 23% X	41% = 943
4	= 8% X	43% = 344
	100%	Total 3936 ÷ 100 = average dressing % estimate of 39.36%











## A5 – Assessing dentition

In most assessments, the month of the drop or age in months or years will be estimated or provided by the owner. This is recorded on the assessment sheet.

For certain specifications however, it is important to mouth all or a sample of the sheep/lambs.

The diagrams below assist in the differentiation of permanent and milk teeth.

### Determining the age of sheep from their teeth

		Lamb 8 milk teeth birth to 15 months
		Hogget 2 permanent incisors 12 months to 20 months
		4 tooth 4 permanent incisors present 18 month to 30 months
		6 tooth 6 permanent incisors present 30 months to 45 months
		Full mouth 8 permanent incisors present 42 months plus

## A6 – Skin assessment

Sight unseen marketing of sheep/lambs relies heavily on accurate skin descriptions.

It is therefore essential that skins be described so buyers can confidently apply maximum values.

### Factors in skin assessment

- Breed
- Age
- Wool length – if shorn, date of shearing
- Seed – type and quantity, evidence of penetration
- Burr – type and quantity
- Pigmented skins
- Black pointed skins
- Ribby skins
- Skin damage – Flystrike, Dermatitis, proportion of daggy and/or stained skins, matting
- Crutching status – crutched (type), uncrutched
- Wet skins
- Dust penetration
- Wool quality in sheep
- Wool weight in sheep
- Mulesing
- Chemical treatment

### Length

Maximum accuracy will be obtained taking an average of measurements from the following locations:

- mid back
- shoulder
- mid flank

**Note:** Take care with shorn sheep/lambs when measuring mid back region.

For final determination of length use the following table.

Wool length	
Inches	mm
0 - 0.25	0 - 6
0.25 - 0.5	6 - 13
0.5 - 1.0	13 - 25
1.0 - 1.5	25 - 38
1.5 - 2.0	38 - 50
2.0 - 2.5	50 - 63
2.5 - 3.0	63 - 75
3.0+	75+

### Wool weight

While it is unrealistic to expect assessors to estimate the amount of wool on the sheep, some indication such as previous cut per head or whether light, medium or heavy cutters would provide the buyer with added confidence.

## Seed

The quantity of seed in the fleece should be nominated as well as the type of seed where possible.

Quantity is usually indicated by one of the following categories:

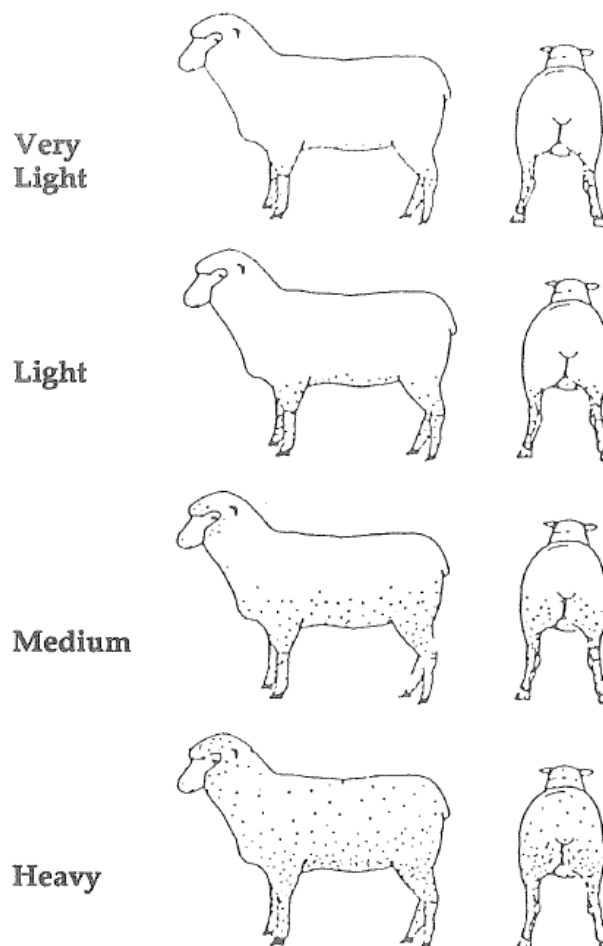
- None observed - Nil
- Very light - Very few surface seeds only
- Light - Very few seed on belly, lower points, brisket
- Medium - Moderate number of seeds on belly, brisket, flanks.
- Heavy - Obvious large number of seeds over most of the body.

**Note:** When natural seed is evident, penetration is very likely.

Particular care should be taken where lambs have had access to natural seed country as penetration of pelt may mean trimming at abattoir with resultant substantial losses to grower and buyer.

Some seed damage is difficult to observe and special attention to this problem is warranted.

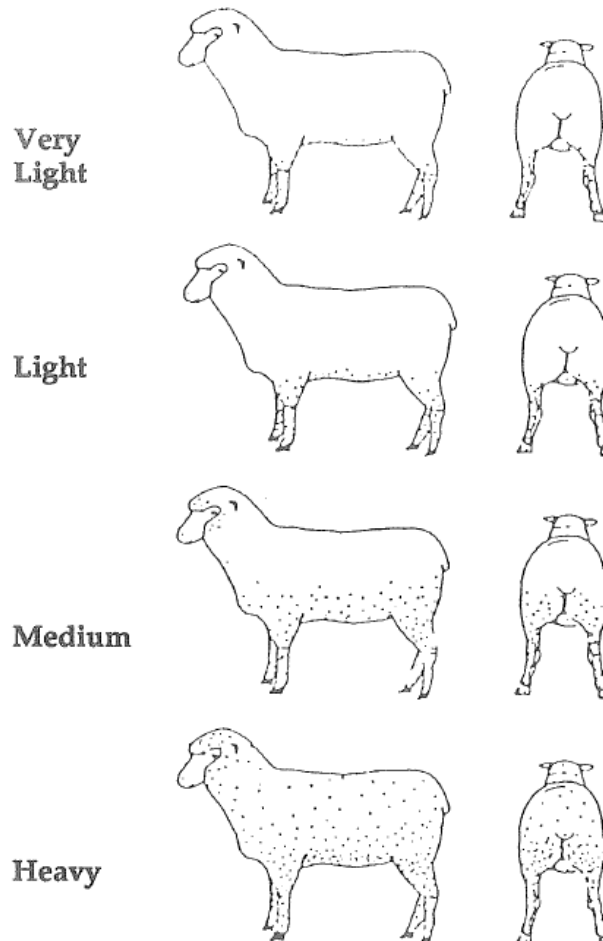
Care should be taken to closely inspect the animals on the brisket, neck, belly, shoulder and lower rib, which are the most reliable areas for assessing damage degree of seed and/or penetration.



## Burr

Nominate type and quantity of burr.

- Nil - No burr of any type
- Very light - Very odd burr only
- Light - Very few burrs of any type on belly, lower points, head, breech
- Medium - Moderate quantity of burr on belly, brisket, flanks
- Heavy - Burr extends above mid rib area and most parts of body



## Pigmented skins

Nominate the proportion of black or coloured skins in the lot.

## Black pointed skins

For example, Suffolk or South Suffolk breeds or their crosses.

## Skin damage

The proportion of skins damaged by flystrike, dermatitis and matting should be noted when above 2%.

The vaccination point is critical in lambs.

## Crutching status

Note if crutched, uncrutched and the proportion of daggy and/or stained lambs.

**Mulesing**

Note if mulesed or unmulesed. Also note the type of mules and if tail stripped.

**Dust penetration**

Where dust penetration onto the skin is heavy, this should be noted, as it will affect skin weight and value.

**Chemical treatment**

Note the dipping and jetting chemicals used and the date of operation where possible.

**Faults**

Note faults such as dog bites, vaccination and the use of branding fluid, lice infestation, broken or tender wool, presence of CLA abscesses, heavy crutching, dirty skins, weathered and wasty backs.

**Frame size**

This should be mentioned in the assessment.



## Skin assessment summary

	Description		Assessment
<b>Shearing</b>	(a) Unshorn		Visual appraisal
	(b) Shorn	- date/month	Producer/owner advice
	(c) Crutched	- yes - no	Visual appraisal
<b>Wool quality</b>	Fineness		Visual appraisal Producer / owner advice
<b>Ribbing</b>	Degree	- light - medium - heavy	Visual appraisal
<b>Matting</b>	Degree	- light - medium - heavy	Visual appraisal
<b>Burr</b>	- very light - light - medium - heavy		Visual appraisal Take particular care with the belly wool region. <b>Note:</b> Degree of various types, eg medium to heavy clover burr belly and ribs and light bathurst burr mainly head.
<b>Seed</b>	- very light - light - medium - heavy		Visual appraisal In following areas – brisket, front shoulder, rib and back.
	Types	- natural - pasture	Visual appraisal Take particular care with natural seed capable of penetrating the pelt. <b>Note:</b> Where seed penetration is observed, same must be nominated. Assessors should not say “no penetration:”, but avoid making unnecessary comment where no penetration is observed
<b>Flystrike Coloured sheep Dermatitis</b>	Nominate percentage		Visual appraisal Operators generally accept to 2% of a lot being offered. Above this, a specific percentage should be referenced.
<b>General</b>	Optional		Visual appraisal May include: - overall characteristics of wool - previous year’s cut weight - previous year’s micron

## **PART B: ASSESSOR COMMENTS – SLAUGHTER STOCK**

Having taken or estimated weights and assessed the fatness and dressing percentage, additional comments are made by assessors to further describe the sheep/lambs.

### **B1 – Stock categories**

<b>Suckers</b>	Unweaned lambs	No permanent incisors
<b>Lambs</b>	Weaned lambs	No permanent incisors
<b>Hoggets</b>	Any sex	Up to 2 permanent incisors
<b>Ewes</b>	Females	
<b>Ewes &amp; Lambs</b>	Females with lambs at foot	
<b>Wethers</b>	Castrated males	
<b>Ewes &amp; Wethers</b>	Mixed sex	One or more permanent incisors
<b>Rams</b>	Entire males	
<b>Goats</b>	Any age, any sex	

AuctionsPlus does not have a stock category for cryptorchids. Classify according to teeth, age and sex.

## **B2 – Carcase quality grade**

These terms are used to describe the expected carcase quality, (not necessarily the visual appeal) of the sheep/lambs, although they would usually go together.

**These terms only apply to slaughter sheep/lambs and should not be used for store stock.** Different terminology can be used for stock that also have potential as stores.

Incorporate all “quality aspects” including evenness of finish, conformation etc.

Obviously ETQ will be reserved for really top sheep/lambs.

Most mobs will be mixed, so specify the approximate break up eg 90% GAQ, 10% FAQ.

### **Excellent/Top Quality (ETQ)**

- Well-bred, very sappy and fresh, small fat cover range where majority are 3 score (not overfat).
- Good clean skins, narrow weight range.

### **Good Average Quality (GAQ)**

- Sappy and fresh with good finish and breed quality.
- **Most well finished lines will fit into this quality description.**
- To assist assessors separating this quality group from excellent or top, one or a combination of the following may be evident:
  - % may be starting to lose visual freshness
  - % under or over done for fatness
  - some burr/seed content or skin damage
  - a range in fats or weights across more than 4 classes

### **Fair Average Quality (FAQ)**

- Fair degree of finish but either need more time to finish or may have lost bloom or sappy appearance.

### **Plain Quality (PLQ)**

- Unfinished, dry or woody in appearance and handling – no reflection on breed quality.
- Will generally suit restocker, boner or special export orders.

### **B3 – Assessor comments**

Assessor comments supply necessary additional information to help better market the stock.

Keep the comments brief.

Assessor comments should consider:

**1. Quality Grade**

ETQ, GAQ, FAQ, PLQ ie for breed type think of weight, fat, shape and age.

While quality grade is dependent on weight, shape, age and market suitability, fat scores can provide an important guide.

**2. Breed**

CFA ewe, 1st cross wether lambs etc.

**3. Weight of lamb or mutton**

Light, medium, heavy

**4. Frame**

% of small, medium and large (only necessary for mutton and old lambs, especially first cross).

**5. Skins**

**6. Other important information**

This could include market suitability and comments to aid the marketing of the stock.

**Note:** Don't repeat what is already stated. Also, it is not necessary to fill in all the lines – the better the sheep offered, the less that needs to be said.

### **Examples**

**Assessor comment** – Top quality shorn lambs, majority weight class 22. Although heavy, apart from a very small percentage, not considered over-fat.

**Interpretation** – Prime, sappy, mostly 20kg dressed weight, majority should not be over-fat.

**Assessor comment** – 55% FAQ, 45% PLQ, aged ewes, majority weight class 16-22, running on good pasture, lambs weaned 1 week.

**Interpretation** – Mainly light condition, boner and canner types, possible broken mouths, on good feed and should be improving in condition following recent weaning of lambs.

	<b>Carcase weight (kg)</b>	<b>Quality grade</b>	<b>Likely fat scores</b>
Light lambs	<16	ETQ,GAQ FAQ PLQ	2, low 3 High 1, high 3,4 Possibly high 4, 5, low 1
Medium lambs	16 – 20	ETQ,GAQ FAQ PLQ	2, 3 Low 2, 4, 5 1
Heavy lambs	20 – 23	ETQ,GAQ FAQ PLQ	High 2, 3, low 4 Low 2, high 4,5 1
Extra heavy lambs	23+	ETQ,GAQ FAQ PLQ	High 2, 3, 4 Low 2, 5 1
Light mutton	16 – 18	GAQ FAQ PLQ	2, 3 High 1, 4 Low 1
Med/heavy mutton	18 - 22	GAQ FAQ PLQ	2, 3 High 1, low 2, 4, 5 Low 1
Extra heavy mutton	22+	Live Export GAQ FAQ PLQ	3, 4, 5 High 2, 3, 4 Low 2, high 1, 5 1

## **PART C: ASSESSOR COMMENTS – STORE STOCK**

### **NOTE – Do not use carcase quality grades.**

All sheep/lambs assessed for AuctionsPlus will have the standard descriptions of weight, fatness etc as previously outlined.

Additional store comments can be added in respect of quality, condition, pregnancy status and frame, as well as drenching, vaccination, delicing and other treatments.

Further comment on breeding, handling, rising or falling nutrition, health, feet, teeth, udders, eyes, anticipated end use etc to be at assessor's discretion.

### **C1 – Stock categories**

<b>Suckers</b>	Unweaned lambs	No permanent incisors
<b>Lambs</b>	Weaned lambs	No permanent incisors
<b>Hoggets</b>	Any sex	Up to 2 permanent incisors
<b>Ewes</b>	Females	
<b>Ewes &amp; Lambs</b>	Females with lambs at foot	
<b>Wethers</b>	Castrated males	
<b>Ewes &amp; Wethers</b>	Mixed sex	One or more permanent incisors
<b>Rams</b>	Entire males	
<b>Goats</b>	Any age, any sex	

## **C2 – Breeding quality**

These terms can apply equally well to purebred or crossbred stock and should not be affected by condition, ie they mainly relate to the quality of the breeding programme and suitability for their end use.

Indicate the approximate percentage in each category.

### **Outstanding**

- Top sires used and top standards of selection and management, ie the small percentage of really first class stock.
- A line with a large culling taken out.

### **Very Good**

- Good quality sires used with heavy culling and selection programme – stock with a reputation for growing out/fattening/producing well.
- A line with a reasonable culling taken out.

### **Good**

- Quality sires used, reasonable selection practices ie average stock.
- A line that has had some culls removed.

### **Fair**

- Average quality sires used, but otherwise little selection practiced.
- A line that needs a heavy cull taken out.

### **Plain**

- Very poor breeding quality, eg inbreeding, structural or conformation faults expected to limit future growth and/or fattening/production ability.
- Could apply to culls or at best seconds or thirds from a line of stock.

### **C3 – Condition**

Fatness has been estimated in mm or fat score for the slaughter stock assessment. For store stock, condition score is also given to expand the description. This is particularly to indicate strength to travel and expected time to fatten.

#### **Forward to Prime**

- All in good condition.
- Large percentage of line killable.

#### **Forward Store**

- Rising in condition/nutrition.
- Very light fat cover.
- Very strong.

#### **Store**

- Nil to very light fat cover.
- Bone structure just visible.
- Sufficient strength to travel well.

#### **Backward Store**

- Low but strong condition.
- Nil fat.
- Bone structure clearly visible.
- Sufficient strength to travel reasonable distances.

#### **Poor**

- Very low condition.
- Nil fat.
- Bone structure clearly visible.
- Sufficient strength to travel reasonable distances.



## **C4 – Growth**

These terms are to indicate how well grown the stock are for their age.

- Below average
- Average
- Well grown
- Very well grown
- Exceptional

## **C5 – Pregnancy terminology**

You should note whether females have been station mated.

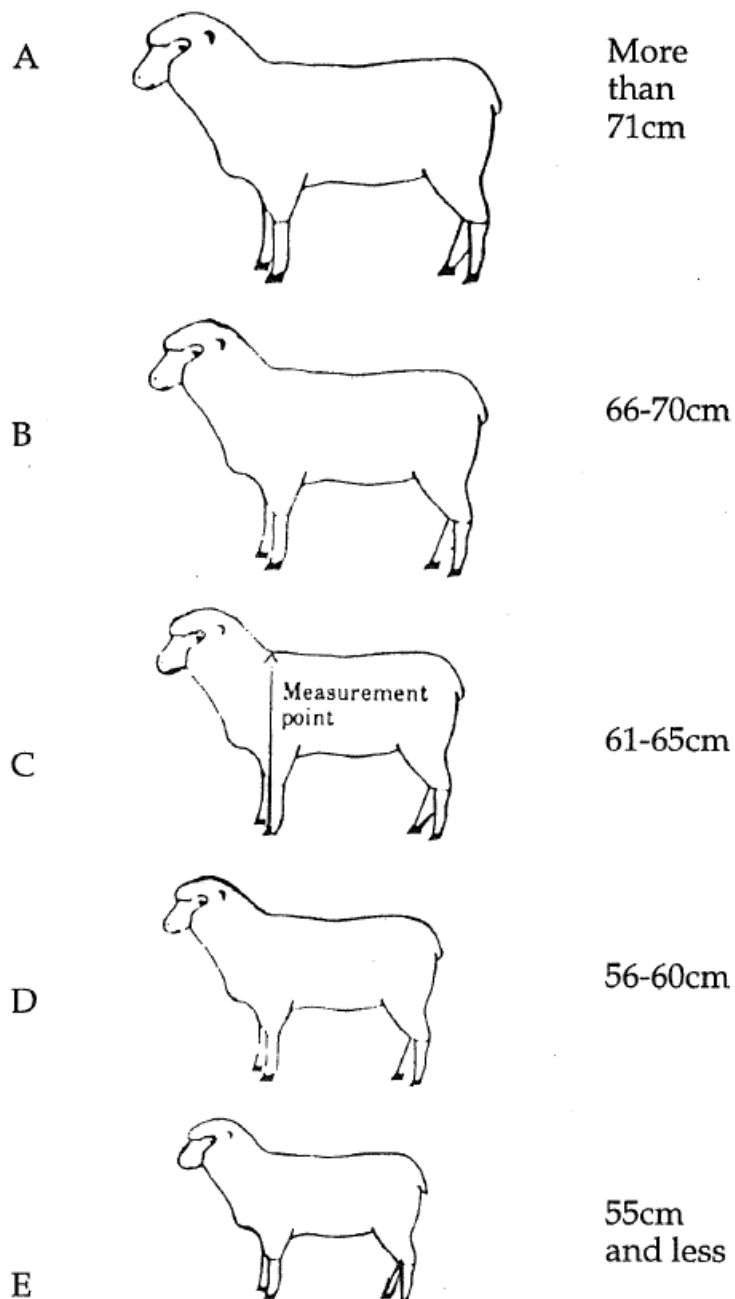
If yes, include depasturing details, % rams and date rams were put in.

### C6 – Frame

This is to specify the likely mature size, fattening pattern, etc.

The frame is measured in terms of the height from the ground to the highest point of the withers (shoulder) in centimetres, **less length of wool**.

The following diagram shows the height relative to each frame score.

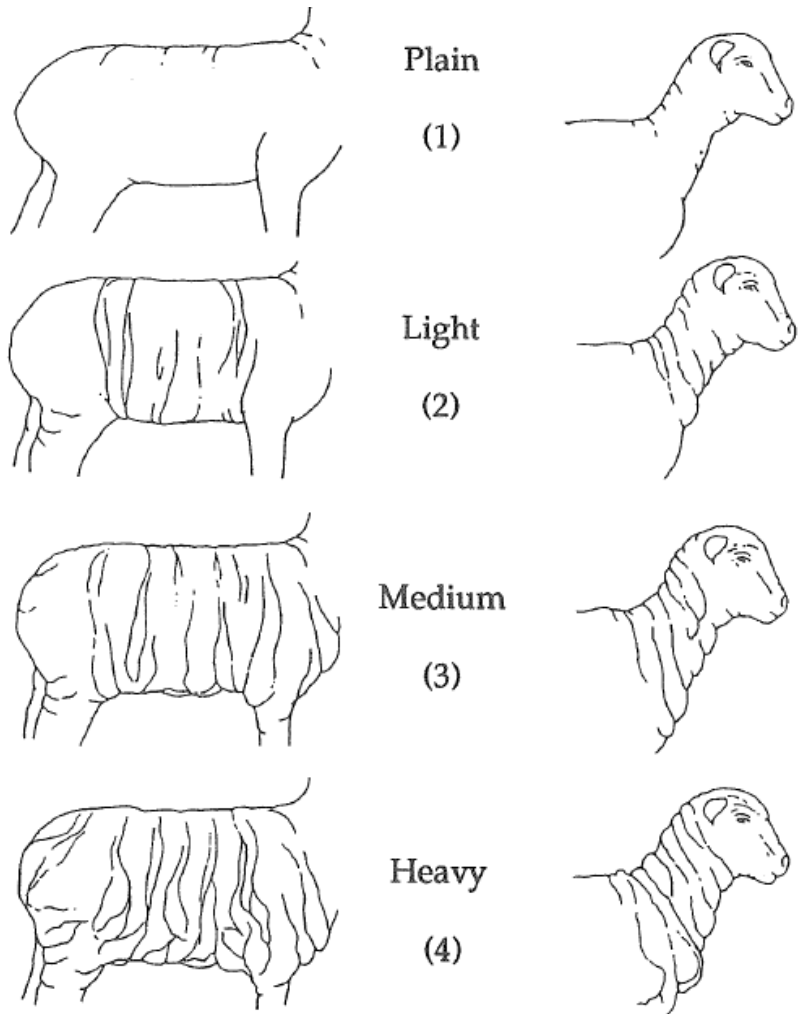


**Note:** Use a calibrated measuring stick or horizontal lines painted on inside of weighing scales as a guide.

### C7 – Wrinkle

Merino influence results in heavy wrinkled lamb skins.

This is important to some lamb buyers as tearing of the pelt may occur during processing.



## **PART D: GROUP ASSESSMENT**

### **D1 – Group Assessment**

Individual assessment of sheep/lambs gives the description of the lot a very high degree of credibility (with individual weighing and manual estimation of fat etc).

There is an element of handling stock closely, however, which may not be possible or desirable in some situations.

Group assessment provides the easier approach to handling the larger numbers being run in pastoral areas, and at the same time provides the credibility of a visual assessment of the stock, backed up where possible by historical data taken from previous slaughter results.

Weighing a sample of the mob may also be possible and adds further credibility.

These assessments are usually done in the paddock.

After the stock are successfully sold, the assessment then becomes the basis for drafting off, for example, 500 wethers that have been sold on AuctionsPlus.

This would be done immediately prior to trucking and may involve the weighing of the stock.

This way, the closeness of the individual assessment lends higher credibility, but the stock have only been mustered and handled once.

If scales are not available, then the sheep/lambs can be drafted visually in the yard, which will still provide a closer and more accurate result than was possible in the paddock.

### **Guide to completing a group assessment**

#### **Weights**

Make sure the highest and lowest weights nominated are in the weight ranges you require for each assessment ie 21kg (AusMeat range 20-22kg), 13kg (AusMeat range 12-14kg).

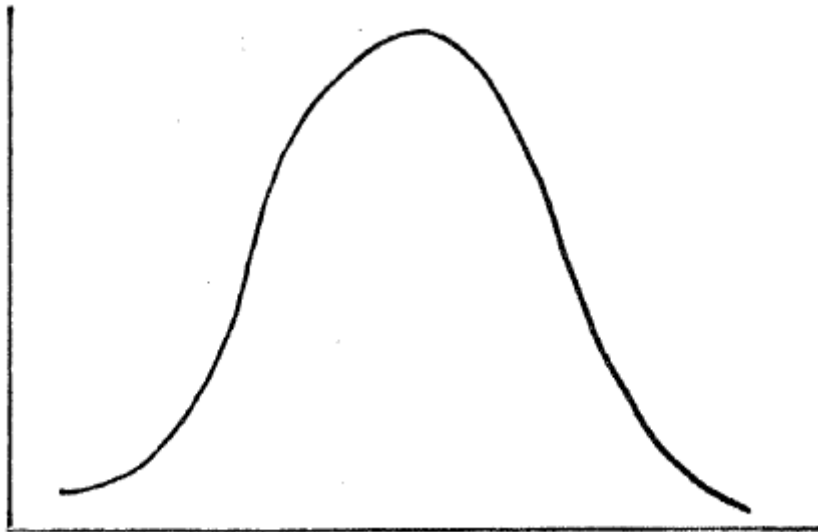
Eg 250 ewes – visual low 13kg, high 21kg

Weight ranges established with the numbers in each range. Deal with the lightest and heaviest first.

12 - 14	20
14 - 16	40
16 - 18	90
18 - 20	70
20 - 22	30

Remember, lambs will usually fit into four or possibly five weight ranges. Mutton will fit into five or six weight ranges (or more if lambing ewes).

Unless the mob is drafted with a heavy “tail” removed (20 %+), the weights will follow a normal bell curve.



A careful assessor and a simple set of accurate scales to weigh a few animals can make group assessments quick, easy, and most importantly, accurate.

**Fats**

Eg 250 ewes – visual fat score low 2, high 4.

2	3	4
90	140	20

Fat scores established with the numbers in each score. Deal with the bottom score and top score first.

	2	3	4		
12-14	20			20 x 13	260
14-16	30	10		40 x 15	600
16-18	40	50		90 x 17	1530
18-20		70		70 x 19	1330
20-22		10	20	30 x 21	630
	90	140	20	250	4350

$4350 \div 250 =$  averaged dressed weight of 17.4kg.

## PART F: SCORING ASSESSMENTS

Marking of assessments is divided into five factors with current weightings totalling 100% as below.

<b>Factor</b>	<b>Weighting</b>
1. Dressed weight	40
2. Fat assessment	20
3. Skin assessment	16
4. Assessor comment	16
5. General description and completion of the AuctionsPlus form	8
<b>TOTAL</b>	<b>100</b>

Using the weightings the following tables 1 to 7 are applied to marking each assessment and factor, with table 8 showing how final results are calculated using a “spread factor” of 1.5.

### F1 – Dressed weight

A percentage rating is applied to this factor on the basis of actual lot dressing percentage against estimate by assessor ie **actual** 48%, **estimate** 46%, **error** -2% = 80%

**Table 1**

	<b>Percentage error</b>	<b>Rating</b>
Up to + or -	0 – 0.75%	100%
	0.8 – 1.5	90
	1.6 – 2.25	80
	2.3 – 3.0	70
	3.1 – 3.75	60
	3.8 – 4.5	50
	4.6 – 5.25	40
	5.3 – 6.0	30
	6.1 – 6.75	20
	> 6.75	No mark

## F2 – Fat assessment

By use of the “spread factor” (1.5) and to establish some uniformity in evaluating sheep/lambs as against other species, tables 2 to 4 demonstrate the method of calculating “error factor” and the % mark when assessing fat scoring estimates against actual results.

**Table 2 – example (i)**

Fat score	Actual %	Estimate %	Difference	Error factor
1	-	2	+2	2
2	38	39	+1	3
3	51	55	+4	7
4	11	4	-7	0
5	-	-	-	-
<b>TOTAL</b>	100	100	0	12

Accumulated error factor = 12

Divide error factor by spread factor (1.5)

$12 \div 1.5 = 8\%$

Deduct 8% from 100% to obtain assessment result.

In this example, this equals 92%.

**Table 3 – example (ii)**

Fat score	Actual %	Estimate %	Difference	Error factor
1	-	10	+10	10
2	38	52	+12	22
3	51	38	-11	11
4	11	0	-11	0
5	-	0	-	-
<b>TOTAL</b>	100	100	0	43

Accumulated error factor = 43

Divide error factor by spread factor (1.5)

$43 \div 1.5 = 28.6\%$

Deduct 28.6% from 100% = 71.4%



**Table 4 – example (iii)**

Fat score	Actual %	Estimate %	Difference	Error factor
1	-	-		
2	38	-	-38	38
3	51	20	-31	69
4	11	75	+64	5
5	-	5	+5	0
<b>TOTAL</b>	100	100	0	112

Accumulated error factor = 112

Divide error factor by spread factor (1.5)

$112 \div 1.5 = 74.6\%$

Deduct 74.6% from 100% = 25.4%

### **F3 – Skin assessment**

Unlike dressing percentage and fat assessment, this is a subjective area where assessors are marked against their own assessment using the following.

**Table 5**

Assessment	Rating (mark)	out of 4
Very good	4.0	= 100%
Good	3.0	= 75%
Fair	2.0	= 50%
Poor	1.0	= 25%

#### **F4 – Assessor comment**

As for skin assessment.

**Table 6**

Assessment	Rating (mark)	out of 4
Very good	4.0	= 100%
Good	3.0	= 75%
Fair	2.0	= 50%
Poor	1.0	= 25%

## **F5 – General description**

As for skin assessment and assessor comment except rating will change as follows.

**Table 7**

Assessment	Rating (mark)	out of 4
Very good	2.0	= 100%
Good	1.5	= 75%
Fair	1.0	= 50%

## F6 – Summary results

**Table 8**

Assessment number	Dressed weight	Fat assessment	Skin assessment	Assessor comment	General
1.	90	81	75	75	75
2.	70	75	100	50	75
3.	85	86	50	75	100
4.	55	78	75	100	75
<b>TOTALS</b>	<b>300</b>	<b>320</b>	<b>300</b>	<b>325</b>	<b>300</b>
÷ totals by 4 to obtain average	75%	80%	75%	81%	75%
X Weightings	40%	20%	16%	16%	8%
= % results	30%	16%	12%	13%	6%

**Add together to obtain total = assessment result 77%**

## **PART G: PARAMETERS FOR ELEVATION AND RELEGATION OF AUCTIONSPLUS ASSESSORS**

### **G1 - A3**

Complete six (6) field assessments of more than one stock category. These assessments are to be done in parallel with an accredited assessor. These assessments will be entered under the accredited assessor's name and the appropriate details entered on the Assessment page of the form to indicate that a parallel assessment was completed.

Paperwork is to be lodged with AuctionsPlus and each assessment will be reviewed by AuctionsPlus staff.

An online exam must be completed prior to accreditation.

To maintain A3 status a minimum of six (6) assessments must be completed in each twelve (12) month period following accreditation at that level.

### **G2 - A3 to A2**

To be promoted from an A3 assessor to A2 status you are required to complete six (6) consecutive assessments of more than one stock category each to mark 80% or above.

To maintain A2 status a minimum of fifteen (15) assessments must be completed in each twelve (12) month period following accreditation at that level.

### **G3 - A2 to A1**

To be promoted from A2 to A1 status, six (6) consecutive assessments of more than one stock category to mark 90% or above.

To maintain A1 status a minimum of twenty (20) assessments must be completed in each twelve (12) month period following accreditation at that level.

***(Note: as of January 2016 there will be additional requirements for maintaining accreditation levels.)***

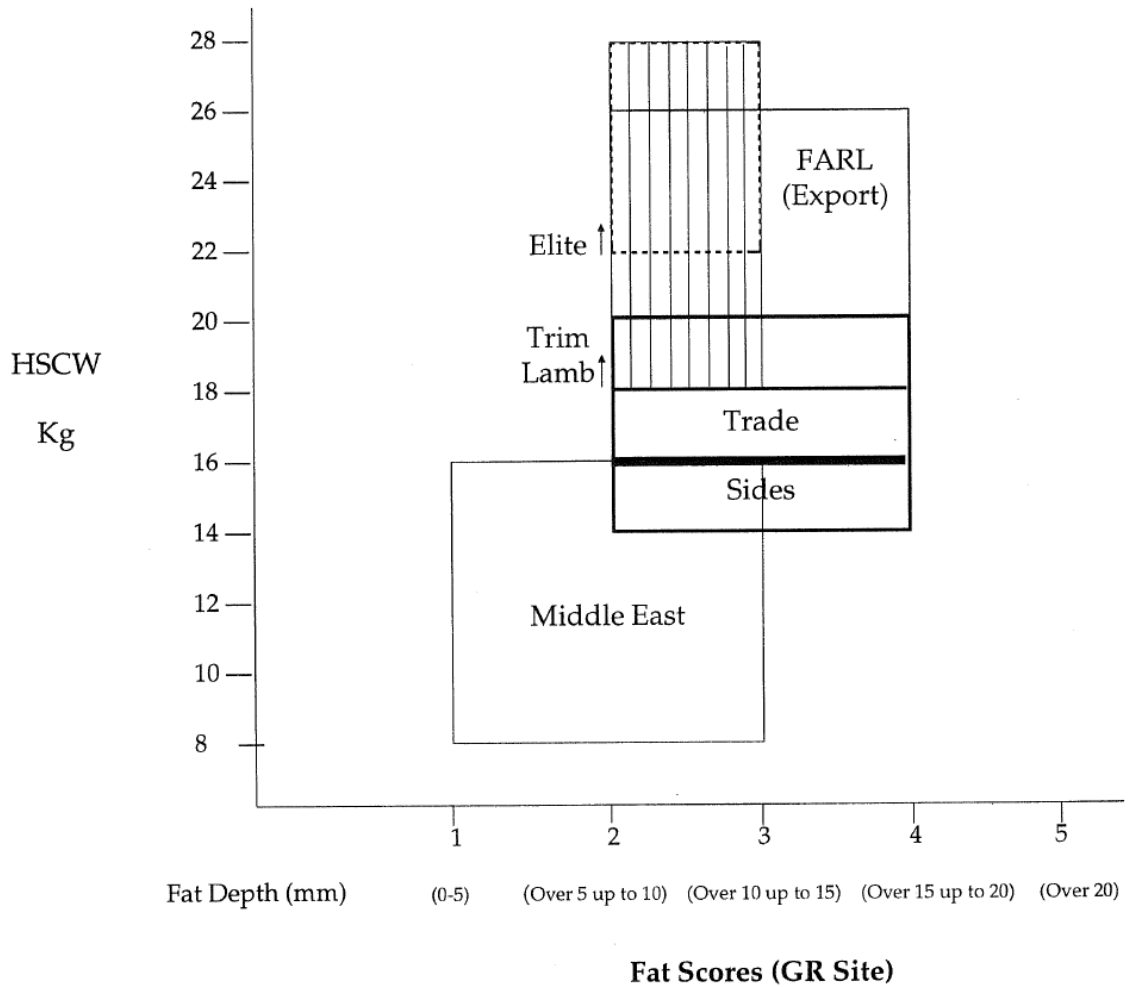
Assessors may be demoted, suspended or terminated at AuctionsPlus discretion in the event of a misdescription claim.

### **G4 - Maintaining Assessor Level**

Accredited assessors cannot complete parallel assessments to maintain their accreditation. Only assessments lodged and offered on the AuctionsPlus system in the assessor's own name will count towards maintaining their accreditation.

## PART H: LAMB MARKETING

### H1 – Market specifications



## PART I: MUTTON MARKETING

### I1 – Mutton Marketing

While the market for mutton changes from time to time, it is possible to broadly categorise the different market requirements.

Dressed weight	Preferred fat score	Comments
Under 12		Too light for any processor
12 - 14		Most exporters will handle if supply is low, but will not pay anything and might even want them delivered.
14 - 18	High 1, low 2 (no fat)	Taiwanese export. Shipped as frozen carcasses. 14 – 16 kg sheep need shape.
16 - 24	High 1 & 2, low 3 (prefer very little fat)	Local trade and export. Could be wholly or partly boned. Prefer 18 - 24 kg.
24 +	2, 3, 4	Mostly export. Some markets such as Russia take 5 score and 26 kg + frozen.
Rams 17 kg +	2 ,3, 4	

Remember local trade sheep 16 – 22 kg are often sold as carcasses, therefore shape is important for legs, cutlets etc.

#### Points to remember

- 16 kg is a critical weight – good assessors advise the % under 16 kg. If mutton is in plentiful supply, 18 kg is a minimum weight.
- Australia exports approximately 110,000 tonnes of mutton annually to the following major countries:

UK	3%
Germany	2%
Russia	6%
USA	6%
Canada	3%
Japan	27%
South-East Asia	15%
Middle East	24%
Africa	4%
New Guinea	5%
- Other than a few orders (eg Russia and New Guinea), the requirement is for less and less fat (buyers discount 4 to 5 c/kg for overfat sheep).
- Most meat has been shipped in carcase (frozen) form but there is now a definite trend to carton meat (bone in and bone out) for ease of handling and cheaper freight rates (eg Fletchers, Dubbo).



- Australia exports 5.75 million sheep as mutton which is 39% of the total slaughter sheep production of 14.8 million.
- Killing charges vary but for most export works in Victoria over 27 to 32 kg (1.25 times), 32.5 to 36 kg (1.5 times), 36.5 to 43 kg (1.75 times), over 43 kg (2 times) and rams (2 times).
- Approximately \$8 to kill and \$8 to bone out.

## **PART J: WHY BUYERS COMPLAIN**

### **J1 – Why buyers complain**

The most common reason for buyer dissatisfaction is careless and unnecessary errors by assessors.

#### **Incorrect numbers**

Differences between numbers delivered and numbers purchased.

A few sheep either way is acceptable, but often a buyer purchase four decks and finds he is 50 short on delivery.

This obviously makes a difference to the freight cost, which is calculated per head, so buyers should be told of variations prior to delivery.

#### **Wrong sheep delivered**

A buyer is entitled to get only what he is paid for.

It is disappointing to see 13 to 14 kg “dogs” (cancer affected and fly blown sheep) sold with 24 to 26 kg wethers.

These sheep won't pass anti-mortem and cost money to dispose of.

This puts a nasty taste in the buyer's mouth – and he won't forget who the assessor was in a hurry.

#### **Poor assessments**

On the whole, most assessments are well done.

Buyers naturally complain about short weights, but have little to say about “overs”.

No assessor is being fair to himself, his vendor or the buyer, unless he chases feedback from the buyer.

About 90% of processors have the results available and are prepared to give them to you.

All you have to do is talk to the buyer or his secretary.

One buyer said he has never had an assessor visit or ring up for a result. He said he would like to receive phone calls from assessors.

Some assessors put too high a dressing percentage on sheep.

With limited curfew, anything over 42%, except on exceptional mutton, is unlikely.

Light weight sheep, lean sheep, sheep with big skins, lambed and weaned ewes and small frame sheep, either in combination or individually, are signals to lower the dressing percentage.

Also watch change of season – during times when excellent feed is available, dressing percentages can hold up better than normal. Conversely, in extended dry periods dressing percentages tend to be lower.

### **Inaccurate skin measurements**

Skins should be measured with a ruler.

An assessor had described skins on 800 wethers as ½ to 1 inch, when in fact they were 1 to 1½ inch.

The buyer didn't complain.

Buyers want to know the minimum length of the wool on the backbone at the mid back position.

### **Watch assessor comments**

When you do an assessment, do you look at your assessor comments and see if they agree with the objective data collected – weights, fats and skin?

Below are three examples which highlight that the objective data and assessor comments disagree.

At best, this confused the buyer – at worst you may lose the buyer altogether.

#### **Assessor 1**

Assessor says lambs that average 11 kg with 35% 1 score “would suit side lamb trade or MK trade”.

No way!

Lambs weighing 8, 9 and 10 kg wouldn't suit the side lamb trade and 35% 1 score would give the mob a lean end that would lack the shape and cover for side lamb or MK trade.

#### **Assessor2**

Assessor says 16/17 kg ewes with 30% 1 score are “good trade sheep”.

Impossible – the sheep are too light and would go down to at least 14 kg.

#### **Assessor 3**

Assessor says restocker ewes that average 48 kg but with a small tail down to 34 kg and 2% 1 score and 65% 2 score are “in ideal condition for joining”.

## APPENDIX 1

### Standard AusMeat Carcase Weights

<b>Class</b>	<b>Weight (kg)</b>
8	Up to 8
10	Over 8 & up to 10
12	Over 10 & up to 12
14	Over 12 & up to 14
16	Over 14 & up to 16
18	Over 16 & up to 18
20	Over 18 & up to 20
22	Over 20 & up to 22
24	Over 22 & up to 24
26	Over 24 & up to 26
28	Over 26

### Standard Liveweights

<b>Class</b>	<b>Weight (kg)</b>
16	Up to 16
20	Over 16 & up to 20
24	Over 20 & up to 24
28	Over 26 & up to 28
32	Over 28 & up to 32
36	Over 32 & up to 36
40	Over 36 & up to 40
44	Over 40 & up to 44
48	Over 44 & up to 48
52	Over 48 & up to 52
56	Over 52