State Farm Estimatics Exam

Removal of shingles

(Ans- estimate for the actual number of squares (not square feet). No estimating or rounding

Replacement of shingles

(Ans-

a) Include waste in the calculation

-10% - Composite

-15% - wood

b) Round up to the nearest bundle

-Assume 3 bundles per SQ for composite shingles

-Assume 4 bundles per SQ for wood

What do wood shingle estimates always end with?

(Ans- fourths. .25, .5, .75, .00

What do composite shingle estimates always end with?

(Ans- thirds. .33, .66, .00

Calculating Hip Roofs

(Ans- get main body first. extensions second.

Hip roof triangular ends

(Ans- are calculated when the main roof is calculated b/c a triangle is accounted for that didn't actually exist

When calculating extensions on a hip roof

(Ans- don't count for the triangle, but don't forget the two parrallelograms remaining (there is a good chance they are identical)

When calculating the main body

(Ans- Don't assume that you can just find one side of a roof and double it. Why? the rafters might be different lengths

How do you find the height of a hip roof?

(Ans- the height of the triangle is equal to the length of the rafter that is forming the parallelogram

(only true if the pitch of the roof is identical and the angles on the hip roof are 90 degrees)

Do you round when removing a roof?

(Ans- No, removal is always the exact number

What calculations can you use to replace?

(Ans-

x1.10 for composite

x1.15 for wood

.33 for composite
.25 for wood

"drop and roll"
(Ans- the method for estimating carpet

How wide are carpet rolls?
(Ans- 12 feet

What carpet allowance must you make in estimates?
(Ans- You must add an additional 3" for length. If you forget this, then you get the question wrong!

It is ok to change the way carpet seams are run in a house
(Ans- False

How do you calculate the removal of carpet
(Ans- It is the actual square footage

What do Removal of carpet & Replacement of carpet pad have in common?
(Ans- they both are the actual square footage

Xactimate doesn't calculate waste on what three things?
(Ans-
Carpet (Not carpet pad), need to add waste
Shingles

Vinyl sheath flooring

How much square footage is it to move and replace the carpet pad?
(Ans- The answer: square footage

To calculate floor removal:
(Ans- divide up into squares/rectangles and determine specific amount to be removed

To calculate replacement of floor:
(Ans-
1) notice seams in flooring
2) drop and roll a 12' roll of carpet
3) add 3" to length (.25)

To calculate linear feet of trusses
(Ans-
1) are they installed 24" of center?
2) convert 24" to feet
3) length of roof (30ft) / 2ft = 15 (the number of trusses)
4) Add 1 for the truss not yet accounted for: 30/2 = 15. Then 15 +1 = 16. 16 trusses

How much would it cost to replace the linear feet of truss on this roof?
(Ans- (total number of trusses) X (width of roof w/out overhangs) = linear feet of roof trusses

What section of a truss are you using to calculate linear feet?

(Ans- the bottom chord...which does not include the overhangs

How thick are stud walls?

(Ans- 4 inches

How do you calculate the painting of walls and ceiling?

(Ans- You will always have 3 measurements

Baseboards are linear feet

(Ans- Just add up the length of the walls (openings only matter if they are larger than 3'0 x 6'8" or 20.01)

Category Code (Xactimate)

(Ans- similar to trade breakdown (DRY = Drywall, RFG - roofing, etc.)

Selector Code (Identifies a specific item within a category)

(Ans- 1/2 = 1/2" drywall, hung, taped floated ready for paint; P = paint - one coat; P2 = paint - two coats

Quality/ Size Ratings

(Ans-

++ Premium Grade

+ High Grade

Average Grade

- Standard Grade (Standard grade is below avg)

< or > refers to size

This is a 3x5 vinyl window, how much would it cost to replace?
(Ans- Do the math, find its a 15sf window, look up the grade, find the correct size, botta bing

Xactimate descriptions are "general" or average.
(Ans- False. They are extremely specific. they are literal. If its in there, then its in there. If its not listed, then its not in there. don't assume!!

There are this many squares (41.6) to remove. How much is the removal cost?
(Ans- Look at price list under "remove" and multiple by that number (31.18): 41.6 x 31.18 = 1297.088

How will they try to trick me in the pricelist?
(Ans- The line will have some information that is either supposed to be there, or not supposed to be there. It's literal. don't let them trip me up!

Trapezoid
(Ans- [(Base1 + Base 2) / 2] x Height

Triangle
(Ans- 1/2 (base x height)

Circle
(Ans- PAI-r-squared (r squared first, then multiply by PAI)

Rectangle
(Ans- base x height

What size door (any opening) do we deduct for?
(Ans- 3'0" x 6'8"

What is the square footage of a 3'0x6'8" door?
(Ans- 20.01

Where do we take a measurements from on an opening?
(Ans- inside jamb to inside jamb

What are out of the other ordinary openings?
(Ans- fireplace/mantle, back splash, bookcase, garage door

Opening?
(Ans- A place there is no trim. Only deduct for 3/0x6/8

When estimating doors
(Ans- include the door (and all related items) to the room it opens in to. This will keep you from having to address it on the other side

Painting around openings and trim
(Ans- professional painters rarely mask...don't include it in the estimate

What are the parts of a truss?

(Ans-
1) Top Chord (Roof rafter)
2) Bottom Chord (Ceiling Joist)
3) Webbing (Bracing tying top and bottom chords together)
4) Gussets (wood or metal plates that hold joints together)

Span
(Ans- length of the bottom chord on a truss. Usually the width of a building. does not include eves/overhangs

What is not a component of a truss?
(Ans- 000

O.C. of the trusses
(Ans- On Center of the framing member is the distance from the center line of one framing member to the center line of an adjacent framing member. Common spacing is 24" or 2'

Length of building
(Ans- from end wall to end wall. (not overhang)

Total LF of trusses
(Ans- # of trusses x span of one truss

# of trusses
(Ans- [length of building in inches / O.C. in inches] + 1

Main parts of a roof
(Ans-
Deck
Rake
Flashing
Valley
Ridge
Dormer
Eave

Sheathing
(Ans- a)Attached to top chord of truss and supports roof rafters
b) forms the deck

What is solid sheathing used for?
(Ans- composition shingles because it is smooth in application

What is spaced sheathing usually used for?
(Ans- wood shingles or shakes

What size spaced sheathing is usually used with 5.5" wood shingles?
(Ans- 5.5"

What is a benefit of spaced sheathing?
(Ans- the gap between boards allow wood roofs to ventilate and evenly dry

also allows shingles to be nailed to the center of the spaced sheathing board

Can you use solid sheathing for wood shakes/shingles?
(Ans- Yes. sometimes it is required in order to keep wind driven rain/snow from penetrating the top of the house

What are the three most common composite shingles?
(Ans-
1) T-Lock (angular cuts)
2) 3 tab (plain jane)
3) Laminated (give a layered...wood like look)

What are comp shingles made of?
(Ans- fiberglass or asphalt-saturated embedded with mineral annuals

What is the weight base of comp shingles?
(Ans- 100 sf or 1 square

3 Tab Butt Square facts:
(Ans-
a) 3 bundles per square
b) range from 200 to 240 lb
c) light to medium weight shingles

Laminated Shingles facts:
(Ans-

a) AKA "Architectural" shingles
b) "layed" look like a wood roof
c) range from 250-500 lb
d) come in 3 or 4 bundles per square
e) medium to heavy weight

Shingle test question: it is possible to buy 3 or 4 bundles per square (Ans- True

What type of fiberglass roof can be rigid? corrogated or greenhouse? (Ans- I have no idea, but its a test question

Wood shingle facts:
(Ans-
a) manufactured in random widths
b) typical widths are 16, 18, or 24"
c) Butt ends vary in thickness from 1/2" to 3/4" but are uniform for a shingles length
d) Taper sawn in order to lay flat

Wood Shake Facts:
(Ans-
a) Hand split, taper split, or straight split
b) All "split" surfaces are rough
d) "Hand split and resawn" have a sawn or smooth back and rough face (smooth back lay flatter)
e) widths are random

What are standard lengths of wood shakes?
(Ans- 18 or 24"

How many bundles per square do wood shakes/shingles come in?
(Ans- 4

What are rigid roofing materials?
(Ans- shingles/tiles made of: clay, aluminum, steel, copper, fiberglass, concrete, slate or plastic

How is rigid roofing sold?
(Ans- by the piece, in bundles or in squares

Rigid roofing does not
(Ans-
deteriorate easily

are more durable than other roofing materials

What roofing material is heavier?
(Ans- Rigid roofing is heavier.

What roofing material requires more labor to install?
(Ans- rigid roofing

What do roof vents do?

(Ans- Allow heat and moisture to escape the attic. Slowing down deterioration and increasing the life of the roof

What are three basic roof types?
(Ans-
1) Ridge vent
2) Roof vent (or Turtle vent) - normally box shaped and made of aluminum or vinyl. usually installed on the back slope
3) Turbine Vent - include turbine shaped louvers that are spun by the wind

What are additional roof vents? do i know what they look like?
(Ans-
Gable Vent
Soffit Vent

What is a cupola vent?
(Ans- Usually seen in barns, but can be in homes too. Looks like a tower top

Power Ventilators (vents)
(Ans-
-larger than roof vents
-bubble shaped cover

-Electric motor/fan controlled by thermostat that turns on at a preset temperature

What do exterior finishes do?
(Ans-
-protect framing, insulation, and interior from weather

What are the two categories of exterior finishes?
(Ans-
a) Masonry
b) non-masonry

Masonry siding products:
(Ans-
brick veneer
stucco
concrete block
stone
glass blocks (for some windows)

(Masonry) common stone products
(Ans- granite, sandstone, marble, slate, limestone

Is brick always a veneer?
(Ans- No, in earlier construction it could also have been a structural part of the walls and exterior finishes

Non Masonry products include
(Ans- wood, aluminum, vinyl, steel, vinyl clad and hardboard

How are non-masonry products usually sold?
(Ans- by the square, or
by the piece

What are common wood siding products?
(Ans- cedar shingles
plywood sheets
beveled or lap
drop
board and batten
reverse board and batten
t1-11

Whats the main problem with wood siding?
(Ans- Its more vulnerable to deterioration and needs periodic paint or stain to protect it

Aluminum siding
(Ans- has a baked on enamel factory finish that can look like wood

requires little maintenance

Vinyl siding
(Ans- Made of PVC (Rigid Polyvinyl-chloride)

durable and economical

can be different thicknesses

What can vinyl siding be installed with?

(Ans

- A backer board for:

-insulation

-rigidity

-strength

-increases the R-Value

Steel siding

(Ans-

-More durable than vinyl, aluminum, or vinyl clad siding

-Steel can be discovered by use of a magnet

What is Vinyl clad siding

(Ans- Aluminum siding with a vinyl coating

it is more dent resistant than aluminum

less likely to crack than vinyl

hardboard siding

(Ans-

-aka Masonite Siding

-comes in sheets 4' wide x 8,9 or 10' long

-7/16 is most common thickness
-primed at factory & painted on site

Fiber cement
(Ans-
-a newer product
-Aka "hardie" plank or board
-installed like wood siding
-more resistant to weather & insects than wood or hardboard siding
-got its name from its creator "James Hardie Company"

Where is soffit located?
(Ans- underneath side of the roof overhang or eave in a closed cornice

What is soffit made of?
(Ans- usually plywood, aluminum or vinyl

What type of soffit will likely have a vent cut into them?
(Ans- Wood soffit

what soffits will be solid or have a perforations?
(Ans- vinyl and aluminum

who installs wood soffits?
(Ans- Usually the carpenter

Who installs aluminum or vinyl soffits?

(Ans- a siding contractor, usually.

How is soffit material estimated?
(Ans- by the square foot

What is the fascia?
(Ans- The finish board (wood, aluminum or vinyl) trim piece that covers the sub fascia and/or the end of the rafter or truss tails

Fascia facts
(Ans-
-wood types - redwood, cedar and pine (requires paint)
-aluminum and vinyl called "Maintenance free"
-alum. and vinyl can be installed on top of wood to keep maintenance out of the picture
-wood purchased by the linear foot
-al/vinyl purchased by the 10-12' piece

Gutters
(Ans- troughs attached to eaves to catch/divert water run off INCLUDEDS downspouts

typical materials: aluminum, galvanized steel, vinyl, copper or wood

measured by LF

What is insulation?

(Ans- Any material that resists the passage of heat into or out of a building

Where is it?

(Ans- Surrounds living or work areas and foundations
installed in floors, walls, ceilings or attics

What is the R-Value?

(Ans- Resistance to heat transfer

(generally, the thicker the insulation, the more resistant to heat transfer)

Rigid polystyrene

(Ans- usually white or blue board.
glued or nailed or glued in place and used to insulate concrete footings and slabs, and concrete or concrete block foundations or basement walls

Batt Insulation

(Ans- a roll of precut thicknesses to fit standard wall cavities

Batt insulation specifics

(Ans-
1) Paper- (kraft) backed insulation has paper on one side
2) Paper is a vapor barrier
3) paper also acts as a air infiltration reducer and keeps water from being trapped in the barrier

4)moisture in insulation reduces it r value
5) foil backed insulation - does the same as paper but reflects heat back into the room
6) Unfaced - (Aka friction fit) has no backing. Usually contractor will cover with plastic in order to provide a vapor barrier

Blanket insulation
(Ans- an uncut roll of insulation cut to length at the jobsite

used in walls and attics

(may/may not have backing)

Cellulose insulation
(Ans- a treated, ground up newspaper that is blown into wall cavities and attics. normally grey in color

shredded-styrene insulation
(Ans- is a white, Styrofoam-type material used primarily to fill cavities in masonry-block walls

Vermiculite Insulation
(Ans- is a tan, Styrofoam-type material used primarily to fill cavities in masonry-block walls

Shredded-fiberglass Insulation

(Ans- is blown into wall cavities and attics; it is normally white in color