Transcription and Summary: Eighth Grade: Mensuration: Lesson Two

Overview

The document titled "G8 Mensuration Lesson 2" is a transcription and summary of a lesson designed for eighth-grade students, focusing on mensuration, which is the measurement of geometric figures. The lesson is structured around a video presentation and includes various teaching methods, including verses, songs, and practical exercises.

Introduction

The lesson begins with a welcoming message and a morning verse that emphasizes the connection between nature and human consciousness. The verse highlights the differences between stones, plants, animals, and humans, focusing on the unique self-awareness and decision-making abilities of humans compared to instinctual behaviors in animals.

Morning Verse

The morning verse serves as a grounding exercise, encouraging students to reflect on their place in the natural world. It discusses the kingdoms of nature, from inanimate objects like stones to living beings, culminating in the self-awareness of humans. This verse is recited daily to foster familiarity and connection among students.

Singing Activity

Following the verse, the lesson transitions into a musical activity where students learn the song "Bring Me a Little Water, Sylvie." The song is introduced in parts, allowing students to engage in repetition and practice. The instructor encourages participation through singing and body percussion, enhancing the learning experience through rhythm and movement.

Review of Mathematical Concepts

The lesson includes a review of previously learned mathematical concepts, specifically focusing on squaring numbers that end in five. The instructor explains a mental trick for calculating squares, demonstrating with examples such as 45 squared (2025) and 65 squared (4225). This method is reinforced through practice problems, encouraging students to apply the technique independently.

Area Calculation

The lesson progresses to the calculation of areas, starting with familiar shapes like squares and rectangles. The instructor reviews the formulas for calculating the area of these shapes and introduces the concept of calculating the area of a right triangle. The formula for the area of a triangle is

presented as one-half the base times the height, with practical examples provided to illustrate the concept.

Example Problems

1. **Right Triangle Area Calculation**: Students are given a triangle with a base of 15 feet and a height of 8 feet. The instructor guides them through the calculation, emphasizing the importance of units and simplification in calculations.
2. **Challenging Triangle Area**: A more complex problem is presented, requiring students to calculate the area of a triangle with a base of 37 meters and a height of 56 meters. The instructor encourages students to attempt the problem independently before discussing the solution.

Dimensions and Measurement

The lesson also covers the concept of dimensions, explaining the differences between one-dimensional, two-dimensional, and three-dimensional spaces. The instructor uses relatable examples, such as moving along a path (one dimension) versus moving in a field (two dimensions) and the addition of height in three-dimensional spaces.

Measurement Units

The document discusses the appropriate units of measurement for length, area, and volume:

- **Length**: Measured in feet, meters, inches, etc.
- **Area**: Measured in square units (e.g., square feet, square meters).
- **Volume**: Measured in cubic units (e.g., cubic feet, cubic meters).

The instructor emphasizes the importance of understanding these concepts as foundational knowledge for future mathematical learning.

Main Lesson Work

Towards the end of the lesson, students are prompted to record formulas for the area of a square, rectangle, and right triangle in their main lesson books. The instructor encourages creativity in their note-taking, suggesting the use of colors to differentiate between the shapes.

Conclusion

The lesson concludes with a reflection on the day's learning and a preview of the next lesson, which will focus on the square root algorithm. The instructor encourages students to think about the fourth dimension, prompting curiosity and engagement with the material.

Overall, the document encapsulates a comprehensive approach to teaching mensuration, integrating artistic expression, practical exercises, and mathematical concepts to create an engaging learning environment for eighth-grade students.

1
00:00:01.340 --> 00:00:03.890
Hello, and welcome back.

2
00:00:04.780 --> 00:00:05.970
Please stand.

3
00:00:07.140 --> 00:00:09.190
We're going to start with our morning verse.

4
00:00:12.610 --> 00:00:16.240
Now, if you've been in a Waldorf school

5
00:00:16.250 --> 00:00:21.060
before, or you've done Waldorf -type homeschool, you may be familiar with this verse.

6
00:00:22.110 --> 00:00:24.800
If not, that's okay.

7
00:00:24.890 --> 00:00:26.960
We're going to say it every day during

8
00:00:26.970 --> 00:00:27.420
the block.

9
00:00:27.530 --> 00:00:28.680
You will catch on.

10
00:00:30.950 --> 00:00:40.150
And this verse basically speaks to the world in which we live, and the kingdoms

11
00:00:40.160 --> 00:00:43.130
of nature, which we talked about a little bit yesterday.

12
00:00:43.840 --> 00:00:53.710
The stones, the plants, which have something the stones don't, that is, the

13
00:00:53.720 --> 00:00:54.530
ability to grow.

14
00:00:55.360 --> 00:00:58.390
The animals, which have something the

15
00:00:58.400 --> 00:01:04.830
plants and the stones don't have, which is the ability to move and respond in

16
00:01:04.840 --> 00:01:06.190
real time to their environment.

17
00:01:08.080 --> 00:01:10.430
And also the human beings, we who have

18
00:01:10.440 --> 00:01:16.050
something that neither the animals, nor the plants, nor the stones have, and you

19
00:01:16.060 --> 00:01:22.010
could call it a self, or a self -consciousness, a self -awareness.

20
00:01:22.880 --> 00:01:26.530
The ability to say, I, to oneself.

21
00:01:28.320 --> 00:01:31.970
And the ability to choose something other

22
00:01:31.980 --> 00:01:34.170
than instinct to do.

23
00:01:36.280 --> 00:01:38.010
If you watch animals, you notice that

24
00:01:38.020 --> 00:01:40.770
they are incredibly instinctual.

25
00:01:41.560 --> 00:01:43.650
Some people will say, oh, well, but

26
00:01:43.660 --> 00:01:50.230
sometimes animals do, you know, like rescue other animals, or even help human beings.

27
00:01:50.800 --> 00:01:51.530
Yeah, that's true.

28
00:01:52.280 --> 00:01:54.070
They can do some remarkable things.

29
00:01:54.900 --> 00:01:59.590
But even that, I'm not sure, is motivated by something other than instinct, because

30
00:01:59.600 --> 00:02:04.530
they see other animals or other human beings as part of their pack, part of

31
00:02:04.540 --> 00:02:05.030
their family.

32
00:02:07.100 --> 00:02:09.850
But human beings, we could say, are truly

33
00:02:09.860 --> 00:02:13.310
capable of altruistic, which is to say selfless action.

34
00:02:15.990 --> 00:02:22.920
We can sort of rise above the lower part of ourselves and do something more extraordinary.

35
00:02:23.090 --> 00:02:24.840
So you hear all about that in this verse.

36
00:02:27.080 --> 00:02:27.410
Okay.

37
00:02:30.920 --> 00:02:34.710
So please stand with your feet together, nice and relaxed.

38
00:02:35.920 --> 00:02:38.230
Your posture, you can just have your arms at your sides.

39

00:02:41.480 --> 00:02:42.370
I'm going to speak the verse.

40
00:02:42.520 --> 00:02:44.330
Like I said, if you know it, speak it

41
00:02:44.340 --> 00:02:44.750
with me.

42
00:02:45.180 --> 00:02:48.850
If not, or if you know parts of it, say

43
00:02:48.860 --> 00:02:49.430
what you know.

44
00:02:50.040 --> 00:02:51.430
It might be a little different than the

45
00:02:51.440 --> 00:02:52.130
version you know.

46
00:02:52.340 --> 00:02:53.230
That's okay, too.

47
00:02:55.530 --> 00:02:57.240
I'll say it every day, so you'll get to know it.

48
00:02:57.310 --> 00:02:57.720
Here we go.

49
00:03:01.150 --> 00:03:04.980
I look into the world in which the sun is

50
00:03:04.990 --> 00:03:11.780
shining, in which the stars are sparkling, in which the stones repose,

51
00:03:12.330 --> 00:03:18.300
where living plants are growing, where sentient beasts are living, where we,

52
00:03:18.570 --> 00:03:21.560
soul gifted, give the spirit a dwelling place.

53
00:03:22.330 --> 00:03:25.680
I look into the soul that lives within my being.

54
00:03:26.690 --> 00:03:33.380
God's spirit moves and weaves in sunlight and in soul light, in heights of worlds

55
00:03:33.390 --> 00:03:36.480
without, in depths of soul within.

56
00:03:37.210 --> 00:03:39.780
To thee, creator spirit, I turn my heart

57
00:03:39.790 --> 00:03:46.780
and seek that strength and grace and skill for learning and for working in me

58
00:03:46.790 --> 00:03:48.820
may live and grow.

59

00:03:57.610 --> 00:03:59.700
Okay, now let's start learning a song.

60
00:04:06.690 --> 00:04:08.400
So this is Bring Me a Little Water, Sylvie.

61
00:04:08.410 --> 00:04:10.040
All right, there's four parts.

62
00:04:10.150 --> 00:04:13.340
We're just going to start learning the
first part and probably just the first

63
00:04:13.350 --> 00:04:13.980
verse today.

64
00:04:16.530 --> 00:04:18.760
So I'll sing it all the way through and

65
00:04:18.770 --> 00:04:20.000
then we'll work on it.

66
00:04:20.330 --> 00:04:20.500
Okay?

67
00:04:24.250 --> 00:04:27.400
Bring me a little water, Sylvie.

68
00:04:28.430 --> 00:04:31.560
Bring me a little water now.

69
00:04:32.790 --> 00:04:36.100
Bring me a little water, Sylvie.

70
00:04:37.170 --> 00:04:40.720
Every little once in a while.

71
00:04:40.730 --> 00:04:43.920
Sylvie, come running.

72
00:04:45.330 --> 00:04:48.940
Bucket in her hand.

73
00:04:49.370 --> 00:04:57.080
I will bring a little water fast as I can.

74
00:04:58.090 --> 00:04:58.520
All right.

75
00:04:59.430 --> 00:05:00.380
Repeat after me.

76
00:05:01.030 --> 00:05:04.180
Bring me a little water, Sylvie.

77
00:05:05.270 --> 00:05:08.840
Bring me a little water now.

78
00:05:09.750 --> 00:05:13.200
Bring me a little water, Sylvie.

79
00:05:14.130 --> 00:05:17.140
Bring me a little water now.

80
00:05:18.690 --> 00:05:22.100

Bring me a little water, Sylvie.

81
00:05:23.190 --> 00:05:25.940
Every little once in a while.

82
00:05:27.070 --> 00:05:30.720
Bring me a little water, Sylvie.

83
00:05:31.690 --> 00:05:35.320
Every little once in a while.

84
00:05:36.170 --> 00:05:40.180
And that one part has several notes in one.

85
00:05:41.230 --> 00:05:43.660
Bring me a little water.

86
00:05:44.630 --> 00:05:47.460
Bring me a little water.

87
00:05:48.070 --> 00:05:48.780
Sing that with me.

88
00:05:49.350 --> 00:05:52.100
Bring me a little water.

89
00:05:53.130 --> 00:05:53.560
Again.

90
00:05:54.070 --> 00:05:56.780
Bring me a little water.

91
00:05:57.990 --> 00:05:58.800
And it goes on.

92
00:05:58.810 --> 00:06:00.400
Bring me a little water, Sylvie.

93
00:06:03.810 --> 00:06:08.080
Every little once in a while.

94
00:06:08.690 --> 00:06:12.200
Every little once in a while.

95
00:06:13.400 --> 00:06:13.900
All right.

96
00:06:13.950 --> 00:06:15.940
Let's sing the whole first part together.

97
00:06:19.570 --> 00:06:21.020
Two, ready, go.

98
00:06:21.450 --> 00:06:24.820
Bring me a little water, Sylvie.

99
00:06:25.830 --> 00:06:29.340
Bring me a little water now.

100
00:06:30.610 --> 00:06:34.640
Bring me a little water, Sylvie.

101
00:06:35.590 --> 00:06:39.200
Every little once in a while.

102
00:06:40.090 --> 00:06:40.740
Let's sing it again.

103
00:06:41.010 --> 00:06:42.420
Two, here we go.

104
00:06:42.870 --> 00:06:46.240
Bring me a little water, Sylvie.

105
00:06:47.410 --> 00:06:50.960
Bring me a little water now.

106
00:06:51.940 --> 00:06:56.020
Bring me a little water, Sylvie.

107
00:06:56.850 --> 00:07:00.840
Every little once in a while.

108
00:07:01.690 --> 00:07:02.260
My turn.

109
00:07:02.950 --> 00:07:05.820
Sylvie, come a running.

110
00:07:07.230 --> 00:07:11.220
Bucket in her hand.

111
00:07:11.930 --> 00:07:14.840
Sylvie, come a running.

112
00:07:16.570 --> 00:07:19.520
Bucket in her hand.

113
00:07:20.530 --> 00:07:28.680
I will bring a little water fast as I can.

114
00:07:29.070 --> 00:07:37.380
I will bring a little water fast as I can.

115
00:07:38.270 --> 00:07:43.520
And the second part of the verse has some interesting notation as well.

116
00:07:44.870 --> 00:07:46.100
Bring.

117
00:07:46.970 --> 00:07:49.540
Sylvie, come a running.

118
00:07:50.690 --> 00:07:54.240
Bucket in her hand.

119
00:07:55.010 --> 00:07:58.520
I will bring a little water.

120
00:07:59.950 --> 00:08:03.940
I will bring a little water.

121
00:08:06.370 --> 00:08:07.560
Sing that with me.

122
00:08:07.570 --> 00:08:12.220
I will bring a little water.

123

00:08:12.850 --> 00:08:13.600
Again.

124
00:08:14.350 --> 00:08:18.020
I will bring a little water.

125
00:08:18.930 --> 00:08:19.360
And again.

126
00:08:20.070 --> 00:08:27.580
I will bring a little water fast as I can.

127
00:08:28.550 --> 00:08:29.880
Let's sing that whole second part

128
00:08:29.890 --> 00:08:31.160
together a couple times through.

129
00:08:32.050 --> 00:08:33.800
Two, here we go.

130
00:08:33.810 --> 00:08:36.980
Sylvie, come a running.

131
00:08:38.530 --> 00:08:42.380
Bucket in her hand.

132
00:08:42.770 --> 00:08:50.800
I will bring a little water fast as I can.

133
00:08:50.850 --> 00:08:51.160
Again.

134
00:08:51.810 --> 00:08:54.560
Sylvie, come a running.

135
00:08:56.290 --> 00:08:59.920
Bucket in her hand.

136
00:08:59.930 --> 00:09:07.980
I will bring a little water fast as I can.

137
00:09:08.850 --> 00:09:10.840
All right, let's sing the whole first

138
00:09:10.850 --> 00:09:12.740
verse twice through.

139
00:09:14.650 --> 00:09:16.280
Two, ready, go.

140
00:09:16.790 --> 00:09:19.820
Bring me a little water, Sylvie.

141
00:09:20.830 --> 00:09:23.820
Bring me a little water now.

142
00:09:25.310 --> 00:09:29.060
Bring me a little water, Sylvie.

143
00:09:30.070 --> 00:09:33.700
Every little once in a while.

144
00:09:34.390 --> 00:09:37.180
Sylvie, come a running.

145
00:09:38.890 --> 00:09:42.360
Bucket in her hand.

146
00:09:42.750 --> 00:09:50.340
I will bring a little water fast as I can.

147
00:09:50.430 --> 00:09:50.720
Again.

148
00:09:51.370 --> 00:09:54.420
Bring me a little water, Sylvie.

149
00:09:55.290 --> 00:09:58.260
Bring me a little water now.

150
00:09:59.610 --> 00:10:03.100
Bring me a little water, Sylvie.

151
00:10:04.170 --> 00:10:07.720
Every little once in a while.

152
00:10:08.430 --> 00:10:11.080
Sylvie, come a running.

153
00:10:12.450 --> 00:10:15.400
Bucket in her hand.

154
00:10:16.450 --> 00:10:23.980
I will bring a little water fast as I can.

155
00:10:27.710 --> 00:10:29.900
All right, now please have a seat.

156
00:10:40.240 --> 00:10:44.470
So yesterday we learned a trick, or reviewed a trick, depending on if you

157
00:10:44.480 --> 00:10:50.070
know it or not, for how to figure out the squares of numbers that end in a five.

158
00:10:51.400 --> 00:10:58.750
And we said that, because five squared is 25, the number is always going to end in 25.

159
00:10:59.600 --> 00:11:02.070
It's just a matter of what's on this side.

160
00:11:02.820 --> 00:11:04.390
We said we can figure that out by taking

161
00:11:04.400 --> 00:11:09.570
the one, or this number, and timesing it by the next higher number.

162
00:11:10.340 --> 00:11:11.370
In this case, two.

163
00:11:11.960 --> 00:11:13.010
One times two is two.

164
00:11:14.880 --> 00:11:16.270
And so it's 225.

165

00:11:16.640 --> 00:11:17.790
Is this true?

166
00:11:17.800 --> 00:11:20.670
Well, we can see.

167
00:11:33.790 --> 00:11:35.000
It is.

168
00:11:37.590 --> 00:11:52.390
So using this trick, and doing it mentally, I implore you to figure out 45 squared.

169
00:11:54.810 --> 00:11:55.440
What's that?

170
00:11:57.150 --> 00:11:58.200
45 squared.

171
00:11:58.370 --> 00:11:59.080
Try to do it mentally.

172
00:11:59.090 --> 00:12:16.630
And the answer is 2025.

173
00:12:18.020 --> 00:12:21.550
We've got the 25 here, and then this would be 4 times 5 is 20.

174
00:12:23.120 --> 00:12:23.750
2025.

175
00:12:24.320 --> 00:12:25.070
How about this one?

176
00:12:28.260 --> 00:12:29.390
65 squared.

177
00:12:43.190 --> 00:12:43.820
The answer there?

178
00:12:47.420 --> 00:12:48.050
4225.

179
00:12:49.100 --> 00:12:51.030
If we have 6 times 7, it would be 42.

180
00:12:51.480 --> 00:12:52.510
And then the 25.

181
00:12:53.580 --> 00:12:57.010
And finally, let's do 75 squared.

182
00:12:58.020 --> 00:12:59.050
Is what?

183
00:13:09.420 --> 00:13:10.150
The answer?

184
00:13:16.670 --> 00:13:17.080
5625.

185
00:13:18.350 --> 00:13:20.180
7 times 8 is 56.

186
00:13:20.930 --> 00:13:22.240
And you've got the 25.

187
00:13:23.230 --> 00:13:23.600
Alright.

188
00:13:38.630 --> 00:13:47.580
Okay, so yesterday we reviewed how to calculate the area of a square and also a

189
00:13:47.590 --> 00:13:54.020
rectangle, which by 8th grade I would assume you would have some familiarity with.

190
00:13:54.530 --> 00:14:02.520
And I left you with the challenge of how do you calculate the area of a right triangle.

191
00:14:04.090 --> 00:14:09.140
And you may already know how to do this if you do great, but I wanted you to

192
00:14:09.150 --> 00:14:09.980
figure it out.

193
00:14:10.490 --> 00:14:14.240
If not, did you figure it out?

194
00:14:14.470 --> 00:14:15.140
Or do you know?

195
00:14:16.530 --> 00:14:17.780
I left you with a hint.

196
00:14:18.930 --> 00:14:26.870
I said, imagine completing the rectangle here.

197
00:14:27.600 --> 00:14:29.470
So you have basically two equal

198
00:14:29.480 --> 00:14:30.770
triangles, yeah?

199
00:14:34.040 --> 00:14:39.560
Now, if you can figure out the area of

200
00:14:39.570 --> 00:14:46.600
this rectangle, you should be able to figure out the area of the triangle it encloses.

201
00:14:48.010 --> 00:14:48.300
Right?

202
00:14:55.000 --> 00:14:56.730
So, what's the area of the triangle?

203
00:15:04.210 --> 00:15:05.540
Let's imagine these are feet.

204
00:15:08.650 --> 00:15:11.020
You have a base of 4, a height of 3.

205
00:15:12.390 --> 00:15:13.320

So basically it's 6.

206
00:15:14.150 --> 00:15:17.500
Because if you were to calculate the area

207
00:15:17.510 --> 00:15:19.520
of the whole rectangle, you'd just say length.

208
00:15:19.790 --> 00:15:21.480
This would be length instead of base, right?

209
00:15:22.910 --> 00:15:24.280
Times width instead of height.

210
00:15:24.630 --> 00:15:25.640
4 times 3 is 12.

211
00:15:26.290 --> 00:15:27.460
And you just take half of that.

212
00:15:27.750 --> 00:15:28.060
6.

213
00:15:28.670 --> 00:15:28.840
Right?

214
00:15:29.910 --> 00:15:40.880
So, the area of a right triangle is

215
00:15:40.890 --> 00:15:50.530
basically 1 half times base times height.

216
00:15:55.020 --> 00:15:55.510
There it is.

217
00:15:56.900 --> 00:16:00.810
It's 1 half of the area of a rectangle.

218
00:16:00.820 --> 00:16:02.250
Or a square.

219
00:16:02.760 --> 00:16:04.790
If this was...

220
00:16:04.800 --> 00:16:06.730
If these were...

221
00:16:06.740 --> 00:16:07.850
What do you call that?

222
00:16:10.450 --> 00:16:11.700
An equilateral...

223
00:16:11.710 --> 00:16:13.620
No, not equilateral.

224
00:16:14.590 --> 00:16:16.420
I can't remember the name at present.

225
00:16:16.630 --> 00:16:17.980
But if these...

226
00:16:17.990 --> 00:16:18.580
If the base and the

227
00:16:18.590 --> 00:16:19.160
height were the same.

228
00:16:20.830 --> 00:16:21.680
Alright, so.

229
00:16:24.030 --> 00:16:24.580
Now.

230
00:16:25.670 --> 00:16:28.880
Empowered with that knowledge, I want you

231
00:16:28.890 --> 00:16:34.880
to figure out the following areas.

232
00:16:36.850 --> 00:16:38.640
So, now you're going to want to get out

233
00:16:38.650 --> 00:16:39.680
your math practice book.

234
00:16:40.010 --> 00:16:40.860
We're going to do some problems.

235
00:16:41.950 --> 00:16:42.160
Okay?

236
00:16:44.750 --> 00:16:45.380
So...

237
00:16:48.170 --> 00:17:05.520
You're going to figure out the area of a right triangle with a base of 15 feet and

238
00:17:05.530 --> 00:17:08.600
a height of 8 feet.

239
00:17:14.610 --> 00:17:17.160
If you want to figure this one out on

240
00:17:17.170 --> 00:17:19.320
your own, go ahead and pause now and do it.

241
00:17:19.390 --> 00:17:21.220
Otherwise, we'll do this first one together.

242
00:17:28.730 --> 00:17:28.940
Okay.

243
00:17:31.110 --> 00:17:36.020
So, I know that the area here is going to

244
00:17:36.030 --> 00:17:44.450
be 1 half times 15 times 8.

245
00:17:46.790 --> 00:17:48.860
Actually, I've got to put in the units here.

246
00:17:48.870 --> 00:17:51.360
We want to remember what we're calculating in here.

247

00:17:51.510 --> 00:17:56.070
So it's feet times 8 feet.

248
00:17:57.940 --> 00:17:58.790
Equals what?

249
00:17:59.120 --> 00:18:03.990
Now, if I were you, I would simplify before I multiply.

250
00:18:04.720 --> 00:18:07.410
Because you've got an 8 up top, right?

251
00:18:07.500 --> 00:18:09.250
Because this is just like saying 15 over

252
00:18:09.260 --> 00:18:10.930
1 and just like saying 8 over 1.

253
00:18:11.460 --> 00:18:13.250
I would simplify that 8 with that too to

254
00:18:13.260 --> 00:18:15.930
make my calculations a little bit easier.

255
00:18:24.470 --> 00:18:27.580
So, pause if you need more time.

256
00:18:27.590 --> 00:18:29.220
I do want you to do this on your own.

257
00:18:32.310 --> 00:18:34.240
But I am going to go ahead and simplify here.

258
00:18:34.730 --> 00:18:36.760
I'm going to divide by 2 so that becomes 1.

259
00:18:37.170 --> 00:18:38.540
Divide that by 2 becomes 4.

260
00:18:39.370 --> 00:18:40.340
Now it's simple.

261
00:18:40.550 --> 00:18:42.400
15 feet times 4 feet.

262
00:18:43.230 --> 00:18:47.180
The answer is 60 feet squared.

263
00:18:49.470 --> 00:18:52.860
That's the area of a triangle with these dimensions.

264
00:18:55.850 --> 00:18:59.180
Alright, we're going to do an area of a triangle.

265
00:19:00.410 --> 00:19:02.880
A triangle with dimensions.

266
00:19:03.350 --> 00:19:05.100
Now, it'll get a little trickier.

267
00:19:10.810 --> 00:19:15.420

I shouldn't say trickier.

268
00:19:15.530 --> 00:19:16.780
I should just say more challenging.

269
00:19:16.930 --> 00:19:18.760
90 feet height.

270
00:19:21.100 --> 00:19:22.270
71 feet.

271
00:19:24.160 --> 00:19:25.450
What is the area?

272
00:19:26.640 --> 00:19:30.150
And I want you to do this one entirely on your own.

273
00:19:30.220 --> 00:19:31.570
Although I will go over it.

274
00:19:31.580 --> 00:19:33.450
Go ahead and pause the video and do that one.

275
00:19:43.420 --> 00:19:43.530
Okay.

276
00:19:44.480 --> 00:19:56.430
Area 1 half times 90 feet times 71 feet.

277
00:19:57.680 --> 00:19:59.950
Again, I can simplify before I multiply.

278
00:20:03.090 --> 00:20:04.760
That becomes 1 because I divided by 2.

279
00:20:04.870 --> 00:20:05.860
This becomes 45.

280
00:20:10.010 --> 00:20:12.180
That makes it maybe a little easier.

281
00:20:15.010 --> 00:20:15.540
I don't know.

282
00:20:17.370 --> 00:20:20.420
I'm going to come over here and do 71

283
00:20:20.430 --> 00:20:21.300
times 45.

284
00:20:22.890 --> 00:20:26.360
I say I don't know because I'm not sure

285
00:20:26.370 --> 00:20:28.600
how astute you are at multiplication.

286
00:20:29.450 --> 00:20:30.740
But, I'm going to do it.

287
00:20:32.010 --> 00:20:34.400
I'm assuming by now that you have your answer.

288

00:20:34.750 --> 00:20:35.640
You have your own answer.

289
00:20:41.430 --> 00:20:54.140
Is that the answer?

290
00:20:59.250 --> 00:20:59.800
Yes.

291
00:21:01.670 --> 00:21:02.460
That's the answer.

292
00:21:04.270 --> 00:21:05.500
Feet squared.

293
00:21:06.270 --> 00:21:06.980
Right?

294
00:21:07.210 --> 00:21:08.520
That's the answer there.

295
00:21:08.950 --> 00:21:13.400
3 ,195 feet squared.

296
00:21:18.120 --> 00:21:20.250
My chalkboard is getting a little busy here.

297
00:21:20.800 --> 00:21:21.630
I wish it were larger.

298
00:21:22.960 --> 00:21:23.310
Okay.

299
00:21:24.520 --> 00:21:26.130
Let's do a third one.

300
00:21:27.340 --> 00:21:29.110
I'm just moving it over here.

301
00:21:30.460 --> 00:21:31.550
Area of a right triangle.

302
00:21:32.800 --> 00:21:42.360
We have a base of 37 meters and a height

303
00:21:42.370 --> 00:21:49.800
of 56 meters was the area.

304
00:21:54.900 --> 00:21:56.430
Pause and do this one.

305
00:22:06.130 --> 00:22:14.620
We have 1 half times 37 meters times 56 meters.

306
00:22:17.510 --> 00:22:18.540
I'm going to simplify.

307
00:22:21.830 --> 00:22:24.740
56 is going to become 28.

308
00:22:27.260 --> 00:22:50.390
So I have to do 37 times 28 minus base

309
00:22:51.660 --> 00:23:09.580

minus 6 1036 meters squared.

310
00:23:09.810 --> 00:23:11.060
Don't forget the meters squared.

311
00:23:12.810 --> 00:23:13.140
Right?

312
00:23:13.750 --> 00:23:15.160
This is my first answer.

313
00:23:16.030 --> 00:23:17.780
This is my second answer.

314
00:23:18.730 --> 00:23:20.400
This is my third answer.

315
00:23:21.910 --> 00:23:22.120
Okay?

316
00:23:25.110 --> 00:23:25.700
Alright.

317
00:23:26.090 --> 00:23:27.060
Make sure you got those right.

318
00:23:42.690 --> 00:23:43.960
Now we're going to do a few more here

319
00:23:43.970 --> 00:23:45.140
just to review yesterday.

320
00:23:46.590 --> 00:23:51.040
So we're going to do number four.

321
00:23:52.690 --> 00:23:54.260
Area of a square.

322
00:23:55.790 --> 00:23:56.180
Okay?

323
00:23:57.850 --> 00:24:04.070
Each side is 85 meters.

324
00:24:07.040 --> 00:24:09.830
So the area is what?

325
00:24:10.860 --> 00:24:12.290
Remember how to do this from yesterday?

326
00:24:12.500 --> 00:24:14.250
Go ahead and pause and do it.

327
00:24:16.480 --> 00:24:19.970
If you need help, I'm going to do it when we're done.

328
00:24:20.660 --> 00:24:24.590
Or in a moment, I should say.

329
00:24:30.980 --> 00:24:36.110
Okay, so you should recall 85 meters goes

330
00:24:36.120 --> 00:24:36.630
in parentheses.

331
00:24:36.640 --> 00:24:38.610
That whole thing squared.

332
00:24:39.280 --> 00:24:42.730
Now, I hope you did this mentally with our trick.

333
00:24:43.920 --> 00:24:45.650
So we know it's going to end in 25.

334
00:24:46.280 --> 00:24:56.920
8 times 9 is 72. 7 ,225 meters squared.

335
00:25:02.400 --> 00:25:04.150
Alright, and number five.

336
00:25:05.580 --> 00:25:08.150
The area of a rectangle.

337
00:25:09.300 --> 00:25:09.590
Okay?

338
00:25:09.740 --> 00:25:16.090
Length is 97 meters.

339
00:25:18.100 --> 00:25:19.890
Width is 30 meters.

340
00:25:21.960 --> 00:25:23.650
The area is what?

341
00:25:24.540 --> 00:25:27.990
Try to do this one mentally if you can.

342
00:25:29.760 --> 00:25:31.290
If not, you can work it out.

343
00:25:46.210 --> 00:25:47.140
Okay, I'm going to do it now.

344
00:25:47.390 --> 00:25:48.740
You can pause if you need more time.

345
00:25:49.810 --> 00:25:52.400
So 97, the length times width.

346
00:25:52.810 --> 00:25:53.600
Area of a rectangle.

347
00:25:53.730 --> 00:25:54.460
Length times width.

348
00:25:54.470 --> 00:25:58.960
97 meters times 30 meters.

349
00:26:00.470 --> 00:26:07.600
Now, I'm going to imagine first that this is 90 times 30, which would be 2 ,700.

350
00:26:11.690 --> 00:26:13.580
Actually, I can't even write that down.

351
00:26:17.410 --> 00:26:20.920
Plus 7 times 30, which is 210.

352
00:26:25.290 --> 00:26:33.730
So that's going to be 2 ,910 meters squared.

353
00:26:35.860 --> 00:26:36.890
That's the answer.

354
00:26:37.620 --> 00:26:38.310
Number five.

355
00:26:48.740 --> 00:27:05.250
Okay, this time I'd like you to stand up

356
00:27:05.260 --> 00:27:07.210
so we can do a little bit of movement.

357
00:27:08.540 --> 00:27:12.350
Alright, so let's go to that now.

358
00:27:17.620 --> 00:27:25.090
Alright, so we're going to start learning the body percussion for Bring Me Little

359
00:27:25.100 --> 00:27:25.890
Water Sylvie.

360
00:27:26.000 --> 00:27:28.130
We're going to just start this real slow

361
00:27:28.140 --> 00:27:30.650
and build it up over a series of lessons.

362
00:27:33.660 --> 00:27:37.950
Actually, the whole routine goes like this.

363
00:27:38.060 --> 00:27:43.570
I'm going to just go through the whole thing a few times just to show you it and

364
00:27:43.580 --> 00:27:45.410
then we'll break it down here.

365
00:27:46.640 --> 00:27:47.590
It goes like this.

366
00:28:09.790 --> 00:28:11.760
First part, nice and slow.

367
00:28:15.400 --> 00:28:16.470
That's all we're going to do.

368
00:28:17.700 --> 00:28:24.730
Clap, right, left, clap, clap, clap, right, left, stomp, clap.

369
00:28:24.820 --> 00:28:26.370
You're stomping with your left foot.

370
00:28:34.440 --> 00:28:38.880
Clap, right, left, stomp, clap, right,

371
00:28:38.950 --> 00:28:49.130
left, stomp, clap, right, left, stomp, clap, right, left, stomp, clap, right,

372

00:28:49.480 --> 00:28:50.610
left, stomp, clap.

373
00:28:57.660 --> 00:29:00.410
Yeah, you're just hitting your chest.

374
00:29:02.200 --> 00:29:05.890
It can be higher or lower, whatever feels comfortable.

375
00:29:10.350 --> 00:29:12.060
I'm doing it up near the clavicle.

376
00:29:12.070 --> 00:29:17.170
So, your collarbone.

377
00:29:28.800 --> 00:29:30.510
Try to get into a rhythm with this.

378
00:29:34.530 --> 00:29:35.520
Speed it up a little bit.

379
00:30:13.110 --> 00:30:18.260
Now, I'm going to just start it at speed

380
00:30:19.230 --> 00:30:22.240
and we're going to just go through it a bunch of times.

381
00:30:23.130 --> 00:30:23.280
Okay?

382
00:30:24.930 --> 00:30:27.420
One, two, here we go.

383
00:31:09.510 --> 00:31:13.260
One, two, here we stop.

384
00:31:19.320 --> 00:31:22.050
Okay, and now please have a seat.

385
00:31:37.210 --> 00:31:43.700
Alright, so we're briefly going to review today the dimensions, first, second, and

386
00:31:43.710 --> 00:31:45.700
third, and how we measure them.

387
00:31:46.430 --> 00:31:48.060
What is the first dimension?

388
00:31:48.330 --> 00:31:52.060
Actually, when I did this with my students in person, we had a lot of fun.

389
00:31:55.670 --> 00:31:59.460
And we kind of moved like a flock of birds on the field.

390
00:32:00.450 --> 00:32:01.760
You'll know what I mean in a minute.

391
00:32:02.670 --> 00:32:05.020
So, the first dimension, we have our

392
00:32:05.030 --> 00:32:06.280

little fellow here.

393
00:32:08.030 --> 00:32:19.820
Let's say he's walking along a boardwalk

394
00:32:19.830 --> 00:32:22.080
or a path that goes, say, on the beach's edge.

395
00:32:22.610 --> 00:32:22.720
Right?

396
00:32:23.590 --> 00:32:27.800
Now, he can only go forward or back.

397
00:32:28.710 --> 00:32:32.120
Or maybe in an arc or something.

398
00:32:32.130 --> 00:32:32.880
Okay?

399
00:32:34.350 --> 00:32:37.820
And if he's sticking to the path, right,

400
00:32:37.930 --> 00:32:41.060
those are the only two ways he can go.

401
00:32:42.490 --> 00:32:44.320
So there I was with my students, we were

402
00:32:44.330 --> 00:32:51.940
all moving forward and backward as like a herd of human beings.

403
00:32:52.770 --> 00:32:57.060
And so the first dimension, we can only move in these ways.

404
00:33:00.040 --> 00:33:08.850
Now, if we're moving in two dimensions, actually, you could say the first

405
00:33:08.860 --> 00:33:10.030
dimension is really like a line.

406
00:33:11.240 --> 00:33:13.550
Two dimensions, now we have a plane, like

407
00:33:13.560 --> 00:33:14.550
a flat surface.

408
00:33:15.360 --> 00:33:16.010
A field.

409
00:33:16.840 --> 00:33:19.830
Or, I don't know, a parking lot.

410
00:33:21.100 --> 00:33:23.630
So now our little fellow is driving.

411
00:33:25.520 --> 00:33:30.930
He can go left, right, can, you know, back up.

412
00:33:33.380 --> 00:33:39.190
If he has, you know, a special parallel

park feature, his car might even be able

413
00:33:39.200 --> 00:33:40.730
to go sideways.

414
00:33:41.260 --> 00:33:43.350
That's really like truly two dimensions,

415
00:33:43.360 --> 00:33:44.730
going sideways like that.

416
00:33:47.660 --> 00:33:50.010
And so when I was with my students there,

417
00:33:50.080 --> 00:33:52.270
we were in a field moving.

418
00:33:52.480 --> 00:33:53.590
I said, just do what I do.

419
00:33:53.880 --> 00:33:58.370
And we were moving sort of all different ways, you know, and it was really funny

420
00:33:58.380 --> 00:34:02.630
to see which ones could keep up with me and not trip over themselves or knock

421
00:34:02.640 --> 00:34:03.330
into the others.

422
00:34:03.880 --> 00:34:05.050
But we had a lot of fun with it.

423
00:34:06.160 --> 00:34:09.990
So, if you're moving in two dimensions, you're moving on a flat surface.

424
00:34:10.940 --> 00:34:12.130
Like a parking lot.

425
00:34:12.700 --> 00:34:12.710
Alright?

426
00:34:16.830 --> 00:34:23.960
Now, if you're moving in three dimensions, you add you have like a flat

427
00:34:23.970 --> 00:34:26.600
surface, but then you have height, depth.

428
00:34:27.270 --> 00:34:29.480
So in comes an aircraft.

429
00:34:34.560 --> 00:34:37.390
You can tell when I spent a lot of time doing it as a child.

430
00:34:44.060 --> 00:34:50.650
Alright, so when I was with my students, we were running along the field.

431
00:34:50.960 --> 00:34:52.190
Every so often I would say, hop!

432
00:34:52.680 --> 00:34:52.990

Hop!

433
00:34:53.300 --> 00:34:55.450
Even if we were going forwards, backwards, or sideways.

434
00:34:56.420 --> 00:34:59.050
And that added just a whole other dimension of fun.

435
00:35:00.780 --> 00:35:07.510
Anyhow, so, three dimensions is now depth, height.

436
00:35:07.720 --> 00:35:08.350
You add height.

437
00:35:08.560 --> 00:35:10.930
So, most objects in this world are three - dimensional.

438
00:35:11.420 --> 00:35:15.250
Like this bottle of homeopathic remedy.

439
00:35:16.840 --> 00:35:17.030
Right?

440
00:35:18.320 --> 00:35:19.610
Because it exists.

441
00:35:19.760 --> 00:35:22.590
It has length and width and height.

442
00:35:24.880 --> 00:35:28.470
Now, yeah, really quickly about three dimensions.

443
00:35:28.780 --> 00:35:31.270
I used to take flying lessons when I was younger.

444
00:35:31.780 --> 00:35:37.430
And one time, I took a flying lesson at an airfield.

445
00:35:37.560 --> 00:35:38.730
I think it was called Shondell.

446
00:35:39.040 --> 00:35:40.730
And it was near Dover, Delaware.

447
00:35:41.040 --> 00:35:43.590
And it was an aerobatic lesson.

448
00:35:44.220 --> 00:35:45.830
And so it was an aircraft not too

449
00:35:45.840 --> 00:35:48.730
different from this, although it was a monoplane, not a biplane.

450
00:35:49.160 --> 00:35:51.490
But it was designed for the same sort of thing.

451
00:35:51.860 --> 00:35:51.970
Okay?

452
00:35:52.240 --> 00:36:02.990
And during that lesson, I learned and executed how to do a loop upside down and

453
00:36:03.000 --> 00:36:04.730
also a barrel roll.

454
00:36:05.160 --> 00:36:06.530
Also upside down.

455
00:36:07.280 --> 00:36:12.810
And that was quite a thrill for a 15 or 16 year old, as I was at the time.

456
00:36:13.400 --> 00:36:17.490
Not too much older than you would be at this present juncture.

457
00:36:18.400 --> 00:36:25.730
And so I really, really got to experience playing in three dimensions in a very

458
00:36:25.740 --> 00:36:32.470
visceral, embodied way in that flight lesson.

459
00:36:35.770 --> 00:36:35.960
Okay.

460
00:36:36.890 --> 00:36:43.660
So the question is how do we measure the three dimensions?

461
00:36:46.570 --> 00:37:00.410
We have length, area, and volume.

462
00:37:04.860 --> 00:37:05.370
Volume.

463
00:37:07.760 --> 00:37:08.150
Volume.

464
00:37:08.160 --> 00:37:08.990
Which goes with which?

465
00:37:09.120 --> 00:37:09.690
What do you think?

466
00:37:11.550 --> 00:37:14.140
It's probably pretty straightforward, right?

467
00:37:14.890 --> 00:37:16.580
But just take a moment to think about this.

468
00:37:22.110 --> 00:37:24.420
So if you said area is how we measure two

469
00:37:24.430 --> 00:37:25.400
dimensions, you'd be correct.

470
00:37:26.130 --> 00:37:28.820
If you said length is how we measure

471
00:37:28.830 --> 00:37:30.620
three dimensions, you'd be incorrect.

472
00:37:31.630 --> 00:37:32.720
Because it's not.

473
00:37:34.710 --> 00:37:36.980
Length is how we measure one dimension.

474
00:37:36.990 --> 00:37:42.480
And volume is how we measure three dimensions.

475
00:37:43.970 --> 00:37:47.440
Now, what units of measure do we use for length?

476
00:37:49.580 --> 00:37:50.390
What do you think?

477
00:37:54.120 --> 00:38:16.050
So if you said cubic feet or feet cubed, cubic meters, gallons, etc., you would be wrong.

478
00:38:16.580 --> 00:38:22.630
Because those are what we use to measure volume.

479
00:38:23.560 --> 00:38:25.750
Volume is measured in cubes.

480
00:38:27.580 --> 00:38:33.490
Cubic feet, cubic meters, you can even do cubic inches, cubic centimeters, cubic

481
00:38:33.500 --> 00:38:37.170
millimeters if you're doing nanotechnology or something like that.

482
00:38:38.580 --> 00:38:42.210
Or if you're a two -year -old and you want to measure really small things, you

483
00:38:42.220 --> 00:38:46.110
ever notice how really young children love really small things?

484
00:38:46.760 --> 00:38:50.730
They pick up little tiny stones and they look at them and they're like, wow,

485
00:38:50.860 --> 00:38:51.810
that's really fascinating.

486
00:38:52.220 --> 00:38:54.850
More often than that, it's like they pick

487
00:38:54.860 --> 00:38:56.550
up a piece of paper and eat it.

488
00:39:01.020 --> 00:39:08.810
So what about just regular feet, regular

489
00:39:09.600 --> 00:39:14.610
meters, maybe miles?

490
00:39:18.640 --> 00:39:19.730
This measures what?

491
00:39:21.460 --> 00:39:29.230
And if you think that it measures length, you would be correct.

492
00:39:29.680 --> 00:39:30.570
You would be correct.

493
00:39:31.560 --> 00:39:33.430
We measure length in regular feet,

494
00:39:33.540 --> 00:39:36.550
meters, miles, centimeters, inches, right?

495
00:39:37.860 --> 00:39:42.670
And if you think that we measure area in

496
00:39:42.680 --> 00:39:53.950
square feet, in square meters, in square miles, in acres, and those sorts of

497
00:39:53.960 --> 00:39:58.550
things, if you think that's how we measure area, you would be correct.

498
00:39:59.600 --> 00:40:00.710
Because it is.

499
00:40:00.760 --> 00:40:01.910
We talked about that yesterday.

500
00:40:02.480 --> 00:40:05.290
Area is measured in squares.

501
00:40:08.640 --> 00:40:10.130
Square whatevers.

502
00:40:10.740 --> 00:40:12.190
Could be square millimeters.

503
00:40:12.440 --> 00:40:14.070
Could be square nanometers.

504
00:40:14.080 --> 00:40:22.250
And volume is measured in cubic meters.

505
00:40:23.180 --> 00:40:26.050
Cubic feet, cubic centimeters, cubic inches.

506
00:40:26.720 --> 00:40:32.490
And then we also have things like cups, pints, and gallons, which are regular

507
00:40:34.220 --> 00:40:36.810
units of measure for liquids.

508
00:40:37.260 --> 00:40:42.170
Or even sand, or something that can fill

509
00:40:42.180 --> 00:40:42.910
a space.

510
00:40:42.920 --> 00:40:43.490
Okay?

511
00:40:47.040 --> 00:40:47.590

Alright.

512
00:40:49.180 --> 00:40:51.030
So we're going to move on to some main

513
00:40:51.040 --> 00:40:51.990
lesson work here.

514
00:40:52.820 --> 00:40:53.730
Main lesson book work.

515
00:40:54.500 --> 00:40:57.430
But before we do, I'll just leave you
with this question.

516
00:40:57.580 --> 00:40:59.690
What is the fourth dimension?

517
00:41:00.420 --> 00:41:01.170
What do you think?

518
00:41:01.220 --> 00:41:02.590
What do you think the fourth dimension is?

519
00:41:04.020 --> 00:41:12.500
And tomorrow we are going to work with

520
00:41:12.510 --> 00:41:14.860
the square root algorithm.

521
00:41:14.870 --> 00:41:18.080
The square root algorithm.

522
00:41:18.710 --> 00:41:20.600
Alright, so get out your main lesson books.

523
00:41:21.410 --> 00:41:22.620
Let's go to that now.

524
00:41:26.030 --> 00:41:31.660
Alright, so I'm going to open up your
main lesson book to another landscape

525
00:41:31.670 --> 00:41:32.880
orientation page.

526
00:41:37.600 --> 00:41:40.610
Here we're just going to record the

527
00:41:41.160 --> 00:41:48.510
formulas for the area of a square, of a
rectangle, and a right triangle.

528
00:41:48.660 --> 00:41:49.750
I'm going to use these three colors.

529
00:41:49.900 --> 00:41:51.510
You're welcome to use whatever colors you
want.

530
00:41:51.920 --> 00:41:54.170
I just picked this because it kind of
reminds me of a square.

531
00:41:54.380 --> 00:41:58.770
A square is like, reminds me of Earth or

matter, so I'm thinking about brown.

532
00:41:59.820 --> 00:42:05.690
Rectangle, also sort of, you know, blockish.

533
00:42:06.380 --> 00:42:08.450
And I think of nature, I think of green.

534
00:42:09.400 --> 00:42:14.470
Triangle, a little bit more I don't know, unique perhaps.

535
00:42:14.760 --> 00:42:15.410
So orange.

536
00:42:20.070 --> 00:42:20.540
Alright.

537
00:42:20.550 --> 00:42:20.720
Alright.

538
00:42:22.150 --> 00:42:23.880
We're going to do like, square,

539
00:42:24.090 --> 00:42:25.480
rectangle, right triangle.

540
00:42:29.510 --> 00:42:35.400
Area of a square.

541
00:42:39.130 --> 00:42:40.840
So I'm going to draw a square.

542
00:42:44.650 --> 00:42:49.790
We'll just keep it simple for now.

543
00:42:50.440 --> 00:43:01.960
And we'll do 16 there.

544
00:43:02.630 --> 00:43:02.700
Yeah.

545
00:43:11.980 --> 00:43:20.770
So we'll say area of a square equals one side squared.

546
00:43:21.920 --> 00:43:28.150
So we have this side equals 4, say 4 feet.

547
00:43:29.740 --> 00:43:38.390
Here, area of this square would be 4 feet.

548
00:43:38.840 --> 00:43:46.670
All things squared, which is equal to 16 feet squared.

549
00:43:47.160 --> 00:43:47.830
Alright.

550
00:43:51.550 --> 00:43:53.080
I'll actually sharpen my pencil here.

551
00:43:54.350 --> 00:44:05.830
I have an electric sharpener when you need one.

552
00:44:07.820 --> 00:44:12.310
Area of a rectangle.

553
00:44:40.740 --> 00:44:43.530
The length is 1, 2, 3, 4, 5.

554
00:44:44.180 --> 00:44:47.770
Let's say 5 meters on this one.

555
00:44:48.600 --> 00:44:51.850
Width 4 meters.

556
00:44:51.860 --> 00:45:01.990
So area of a rectangle equals length times width.

557
00:45:03.760 --> 00:45:19.920
So, area of this rectangle equals 5 meters times 4 meters, which equals 20

558
00:45:19.930 --> 00:45:22.060
meters squared.

559
00:45:24.710 --> 00:45:28.220
And again, why are these units of measure

560
00:45:28.230 --> 00:45:28.820
in square?

561
00:45:30.110 --> 00:45:32.720
Because what dimension, how many

562
00:45:32.730 --> 00:45:33.820
dimensions are these in?

563
00:45:37.650 --> 00:45:40.180
If you said 3, you'd be totally wrong.

564
00:45:41.230 --> 00:45:47.440
Just absolutely positively wrong as can be, because they're in two dimensions.

565
00:45:49.710 --> 00:45:50.320
Okay.

566
00:45:52.050 --> 00:46:04.200
And finally, area of a right triangle.

567
00:46:06.910 --> 00:46:07.280
Okay.

568
00:46:08.050 --> 00:46:09.580
You know, I'm thinking maybe we should

569
00:46:09.590 --> 00:46:10.500
underline these.

570
00:46:17.780 --> 00:46:18.910
Area of a right triangle.

571
00:46:22.840 --> 00:46:23.150
Alright.

572
00:46:33.180 --> 00:46:40.770
Let's do 1, 2, 3, 4 on this side.

573
00:46:43.480 --> 00:46:47.890
1, 2, 3, 4, 5 here.

574
00:46:49.840 --> 00:46:54.010
So we'll say base equals 5.

575
00:46:54.400 --> 00:46:56.390
And 2 meters again.

576
00:46:57.460 --> 00:47:03.640
Height equals 4 meters.

577
00:47:07.450 --> 00:47:21.420
Area of a right triangle equals 1 half times base times height.

578
00:47:22.670 --> 00:47:36.820
So in this case, the area of this one equals 1 half times 5 meters times 4 meters.

579
00:47:37.890 --> 00:47:39.140
Well, 5 times 4 is what?

580
00:47:41.920 --> 00:47:43.750
If you said 20, you'd be right.

581
00:47:44.640 --> 00:47:50.310
Half of 20 is 10. 10 meters squared.

582
00:47:50.900 --> 00:47:51.150
Okay.

583
00:47:54.690 --> 00:47:58.540
So we're really just kind of making our own textbook, if you will.

584
00:47:59.530 --> 00:48:00.840
Just recording what we discover.

585
00:48:01.030 --> 00:48:01.280
Okay.

586
00:48:01.850 --> 00:48:04.020
That's all for this lesson.

587
00:48:04.790 --> 00:48:05.980
Thank you very much and we will see you

588
00:48:05.990 --> 00:48:06.540
for the next one.

589
00:48:07.090 --> 00:48:07.500
Take care.

590
00:48:07.730 --> 00:48:07.980
Bye -bye.