Grade 7/8 Math Measurement – Conversion of Units 1

We have been working on converting units. There are some common conversion factors. Some should be becoming familiar to you if you are doing the work assigned in class.

Units	To units	Linear	Square	Cubic
		Conversion factor	Conversion Factor	Conversion Factor
Centimetres	Inches	2.54 cm/in	6.4516 cm ² /in ²	16.3871 cm ³ /in ³
Yard	Metre	0.9144 m/yd	0.8361 m ² /yd ²	0.7646 m ³ /yd ³
Inches	Feet	12 in/ft	144 in ² /ft ²	1728 in ³ /ft ³
Feet	Yard	3 ft/yd	9 ft ² /yd ²	27 ft ³ /yd ³
Feet	Metre	0.3048 m /ft	0.0929 m ² /ft ²	0.02832 m ³ /ft ³

Use these to find the number of units after conversion. Round to one decimal place.

12 inches is	30.5	centimeters	Conversion factor?	2.54	Mult or Div?
100 cm is	39.4	inches	Conversion factor?	2.54	_ Mult or <mark>Div</mark> ?
24.689 m is	27	yards	Conversion factor?	0.9144	_ Mult or <mark>Div</mark> ?
59.055 yd is	54	metres	Conversion factor?	0.9144	_ Mult or Div?
72 inches is	6	feet	Conversion factor?	12	Mult or Div?
8 feet is	96	inches	Conversion factor?	12	Mult or Div?
144 in ² is	1	ft ²	Conversion factor?	144	Mult or <mark>Div</mark> ?
7.75 in ² is	50	cm²	Conversion factor?	6.4516	Mult or Div?
83.61 m ² is	100	yd²	Conversion factor?	0.8361	Mult or <mark>Div</mark> ?
62.7075 m ² is	75	yd²	Conversion factor?	0.8361	Mult or <mark>Div</mark> ?
81 ft ² is	9	yd^2	Conversion factor?	99	Mult or <mark>Div</mark> ?
409.6775 cm ³ is	25	in ³	Conversion factor?	16.3871	Mult or <mark>Div</mark> ?
45.876 m ³ is	60	yd³	Conversion factor?	0.7646	Mult or <mark>Div</mark> ?
1.62038 ft ³ is	2800	in ³	Conversion factor?	1728	Mult or Div?
13120105 in ³ is	215	m^3	Conversion factor? 17	28_and_0.0283	2_Mult or Div?
54 ft ³ is	2	yd^3	Conversion factor?	27	Mult or <mark>Div</mark> ?
7.62m is	25	ft	Conversion factor?	0.3048	Mult or Div?
37.16 m ²	400 f	t ²	Conversion factor?	0.0929	Mult or Div?