

Metric/Metric Conversions

Length/Distance

1 angstrom	= 0.0001	micrometers
1 angstrom	= 0.1	nanometers
1 nanometer	= 0.000001	millimeters
1 nanometer	= 0.001	micrometers
1 nanometer	= 10	angstroms
1 micrometer	= 0.001	millimeters
1 micrometer	= 1,000	nanometers
1 micrometer	= 10,000	angstroms
1 millimeter	= 1,000,000	nanometers
1 millimeter	= 1,000	micrometers
1 millimeter	= 0.1	centimeters
1 millimeter	= 0.01	decimeters
1 millimeter	= 0.001	meters
1 centimeter	= 10	millimeters
1 centimeter	= 0.1	decimeters
1 centimeter	= 0.01	meters
1 centimeter	= 0.00001	kilometers
1 decimeter	= 100	millimeters
1 decimeter	= 10	centimeters
1 decimeter	= 0.1	meters
1 decimeter	= 0.0001	kilometers
1 meter	= 1,000	millimeters
1 meter	= 100	centimeters
1 meter	= 10	decimeters
1 meter	= 0.001	kilometers
1 kilometer	= 100,000	centimeters
1 kilometer	= 10,000	decimeters
1 kilometer	= 1,000	meters

Area

1 square millimeter	= 0.01	square centimeters
1 square centimeter	= 100	square millimeters
1 square centimeter	= 0.0001	square meters
1 square meter	= 10,000	square centimeters
1 square meter	= 0.0001	hectares
1 square meter	= 0.000001	square kilometers
1 hectare	= 10,000	square meters
1 hectare	= 0.01	square kilometers
1 square kilometer	= 1,000,000	square meters
1 square kilometer	= 100	hectares

Volume

1 milliliter	= 0.001	liters
1 milliliter	= 0.000001	cubic meters
1 cubic centimeter	= 0.001	liters
1 cubic centimeter	= 0.000001	cubic meters
1 liter	= 1,000	milliliters
1 liter	= 1,000	cubic centimeters
1 liter	= 0.001	cubic meters
1 cubic meter	= 1,000,000	milliliters
1 cubic meter	= 1,000,000	cubic centimeters
1 cubic meter	= 1,000	liters

Mass

1 milligram	= 0.001	grams
1 gram	= 1,000	milligrams
1 gram	= 0.001	kilograms
1 kilogram	= 1,000	grams
1 kilogram	= 0.001	tonnes
1 tonne	= 1,000	kilograms

Name _____ Date _____

320 meters = _____ kilometers

1,860 millimeters = _____ centimeters

55.8 decimeters = _____ centimeters

1,880 decimeters = _____ kilometers

78.5 meters = _____ centimeters

786 centimeters = _____ meters

Answer Key

$$320 \text{ meters} = \underline{0.32} \text{ kilometers}$$

$$1 \text{ meter} = 0.001 \text{ kilometers}$$

$$320 \times (1 \text{ meter}) = 320 \times (0.001 \text{ kilometers})$$

$$320 \text{ meters} = 0.32 \text{ kilometers}$$

$$1,860 \text{ millimeters} = \underline{186} \text{ centimeters}$$

$$1 \text{ millimeter} = 0.1 \text{ centimeters}$$

$$1,860 \times (1 \text{ millimeter}) = 1,860 \times (0.1 \text{ centimeters})$$

$$1,860 \text{ millimeters} = 186 \text{ centimeters}$$

$$55.8 \text{ decimeters} = \underline{558} \text{ centimeters}$$

$$1 \text{ decimeter} = 10 \text{ centimeters}$$

$$55.8 \times (1 \text{ decimeter}) = 55.8 \times (10 \text{ centimeters})$$

$$55.8 \text{ decimeters} = 558 \text{ centimeters}$$

$$1,880 \text{ decimeters} = \underline{0.188} \text{ kilometers}$$

$$1 \text{ decimeter} = 0.0001 \text{ kilometers}$$

$$1,880 \times (1 \text{ decimeter}) = 1,880 \times (0.0001 \text{ kilometers})$$

$$1,880 \text{ decimeters} = 0.188 \text{ kilometers}$$

$$78.5 \text{ meters} = \underline{7,850} \text{ centimeters}$$

$$1 \text{ meter} = 100 \text{ centimeters}$$

$$78.5 \times (1 \text{ meter}) = 78.5 \times (100 \text{ centimeters})$$

$$78.5 \text{ meters} = 7,850 \text{ centimeters}$$

$$786 \text{ centimeters} = \underline{7.86} \text{ meters}$$

$$1 \text{ centimeter} = 0.01 \text{ meters}$$

$$786 \times (1 \text{ centimeter}) = 786 \times (0.01 \text{ meters})$$

$$786 \text{ centimeters} = 7.86 \text{ meters}$$