Interconversions

Imperial to Metric - MULTIPLY →

To be given these:

1 in	=	2.54 cm
1 ft	=	30.48 cm
1 yd	=	0.91 m
1 mi	=	1.61 km

← Metric to Imperial - DIVIDE

ex 1) 6.3 in = 16 cm

ex 2) 7 yd = 6.37 m

ex 3) 5.5 ft = 167.64 cm

ex 4) 20 cm = 7.87 in

ex 5) 100 km = 62.11 mi

ex 6) 15 in = 381 mm

15 in = 38.1 cm (×2.54, ×10)

ex 7) 30 ft = 9.14 m

30 ft = 914.4 cm (×30.48, ÷100)

Rounding

5.77894

5.78

5.778

5.779

ex 8) 20 ft 5 in = 6223 mm

20 ft = 240 in (×12) + 5 in

245 in = 622.3 cm (×2.54, ×10)

ex 9) 12 ft 5 in 3.78 m

12 ft = 365.76 cm (×30.48)

5 in = 12.7 cm (×2.54)

+ → 378.46 cm (÷100)

ex) You drive 68 mi. Your friend drives 114 km. Who drove further?

HINT: just convert one of them

$68\text{ mi} = 109.48\text{ km}$ (×1.61)

OR

$114\text{ km} = 70.81\text{ mi}$ (÷1.61)

our friend drove further.

ex) Erika is 5 ft 6 in on her driver's license, how tall is she in cm?

$5\text{ ft} = 60\text{ in} + 6\text{ in}$ (×12)

$66\text{ in} = 167.64\text{ cm}$ (×2.54)

She is 167.64 cm tall.

ex) A trucker's semi-trailer is 3.5 m high. The clearance under a bridge is 11 ft 9 in. Will the semi clear the bridge?

More than 1 option

Bridge

$11\text{ ft} = 132\text{ in} + 9\text{ in} = 141\text{ in}$ (×12)

$141\text{ in} = 358.14\text{ cm} \rightarrow 3.58\text{ m}$ (×2.54, ÷100)

Yes, it will barely fit.