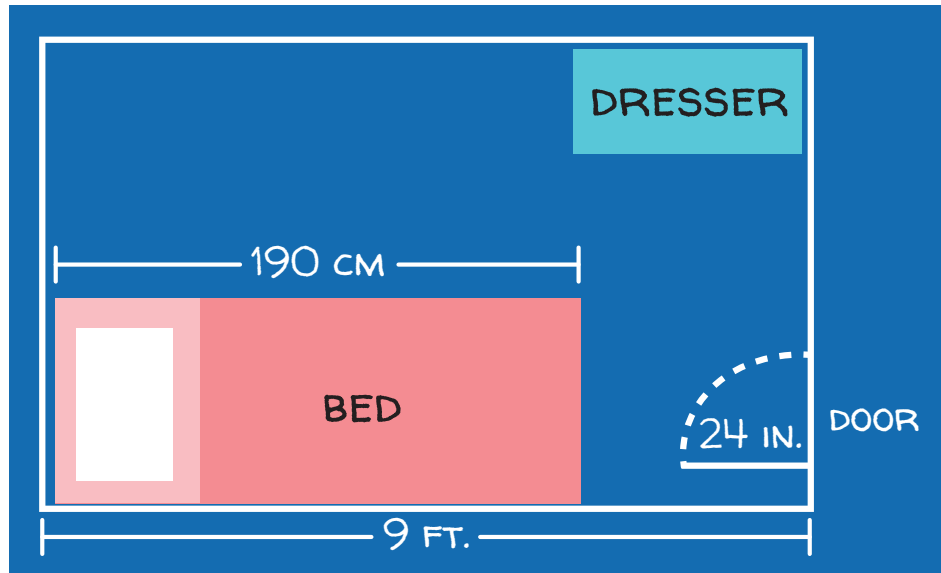


Raina's Redecoration: Converting Between Customary and Metric Units

Raina is redecorating her bedroom. She wants to order furniture and decorations from a French company. The company measures items in metric units, but Raina wants to know the measurements in customary units.

She plans on placing her new bed and dresser as shown in this blueprint.



If 1 foot = 30.48 centimeters, how long is Raina's room in centimeters?

274.32 centimeters

When the door is closed, how many centimeters will be left between the foot of Raina's bed and her bedroom door?

84.32 centimeters

If Raina's bedroom door is 24 inches wide, will she have space to open her door completely? Explain. Remember that 12 inches = 1 foot.

STUDENT ANSWERS WILL VARY.

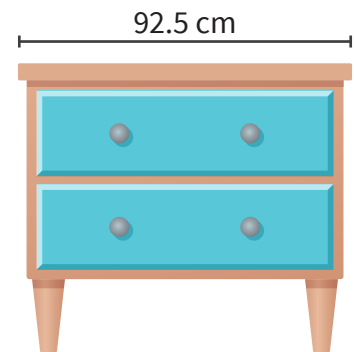
Yes. Raina's bedroom door is 24 inches, or 2 feet, wide. That is equal to 60.96 centimeters. Since there are 84.32 centimeters between the foot of her bed and the closed door, there is enough space to open the door completely.

Raina's Redecoration: Converting Between Customary and Metric Units

Raina has a square mirror that she wants to place on top of her new dresser. The mirror is 40 inches wide. If 1 inch = 2.54 centimeters, will the mirror fit on top of this dresser? Explain.

STUDENT ANSWERS WILL VARY.

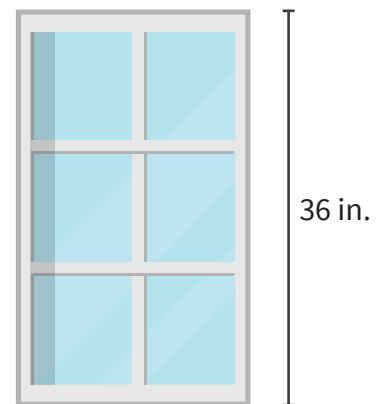
No. The mirror is 101.6 centimeters wide. Since the dresser is 92.5 centimeters wide, the mirror will not fit on top of it.



Raina orders curtains from the same company. The shortest curtains that the company sells are 62 centimeters long. Will those curtains be long enough to cover the entire length of her bedroom window? Explain.

STUDENT ANSWERS WILL VARY.

No. The window is 91.44 centimeters long, so those curtains will not be long enough to cover the entire length of Raina's bedroom window.



Each item Raina orders will ship separately. If 1 kilogram \approx 2.2 pounds, find the approximate weight of each item in pounds. Round each answer to the nearest tenth.

Item	Weight (kg)	Approximate Weight (lb.)
Curtains	0.82	1.8
Bed	24.2	53.2
Dresser	26.3	57.9

Use the values from the table to determine about how many pounds the items will weigh in all.

About 112.9 pounds