

Length word problems (mixed units)

Grade 5 Word Problems Worksheet

1. The ceiling is 8 feet 7 inches from the floor. Lucas can reach up to 7 feet 9 inches when he raises his arm. If he stands on a foot stool that is 8 inches tall, can he reach the ceiling?

2. A laptop computer is 59 mm thick. The packing box for the laptop is 12.8 cm deep. If the packing material fills up the space between the computer and the box, how thick is the packing material?

3. Sophia has a bundle of ropes that is 28 yards 2 feet long. To set up a tent, she needs to tie two 8-foot ropes to one corner of the tent. There are four corners on the tent. How much (measured in yards) rope is left after she set up the tent?



4. At a long jump competition, each athlete can make 3 jumps. Victoria's first jump is 4.79 m. She jumped 32 cm further in her second jump. In her third jump, she jumped 80 mm less than her second jump. What is her result for the third jump?
5. Jack is an athlete. During his daily training, Jack hops along a path that is 35 yards long. If he can hop forward 15 inches each time, how many hops can he make along the path?
6. Each gold coin is 5 mm thick, and each silver coin is 2 mm thick. A stack of 148 gold coins and 216 silver coins is about _____ cm thick.
- a. 1.2
 - b. 120
 - c. 1,200

Answers

1. $7 \text{ feet } 9 \text{ inches} + 8 \text{ inches}$
 $= 7 \text{ feet } 17 \text{ inches}$
 $= 8 \text{ feet } 5 \text{ inches}$
 $8 \text{ feet } 5 \text{ inches} < 8 \text{ feet } 7 \text{ inches}$
He cannot reach the ceiling if he stands on a foot stool.
2. $59 \text{ mm} = 5.9 \text{ cm}$
 $12.8 - 5.9 = 6.9$
The packing material is 6.9 cm thick.
3. $2 \times 8 \text{ feet} \times 4 = 64 \text{ feet}$
 $64 \text{ feet} = 21 \text{ yards } 1 \text{ foot}$
 $28 \text{ yards } 2 \text{ feet} - 21 \text{ yards } 1 \text{ foot} = 7 \text{ yards } 1 \text{ foot}$
7 yards 1 foot of ropes are left after she set up the tent.
4. $4.79 \text{ m} + 32 \text{ cm} - 80 \text{ mm}$
 $= 4.79 \text{ m} + 0.32 \text{ m} - 0.08 \text{ m}$
 $= 5.03 \text{ m}$
Her result for the third jump is 5.03 m.
5. $35 \text{ yards} = 1,260 \text{ inches}$
 $1,260 \div 15 = 84$
He can make 84 hops along the path.
6. $5 \times 148 = 740 \text{ mm}$
 $2 \times 216 = 432 \text{ mm}$
 $740 + 432 = 1,172 \text{ mm}$
 $1,172 \text{ mm} = 117.2 \text{ cm}$
Answer is (b).