PROBLEMS AND SOLUTIONS - OPERATIONS ON SYSTEMS OF MEASUREMENT
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YOU MUST BE ABLE TO DO THE FOLLOWING PROBLEMS WITHOUT A CALCULATOR!

Problem 1:

Find the sum of **4 ft + 5 in**.

Problem 2:

Find the sum of **7 lb 8 oz + 3 lb 12 oz**. Write your answer in standard notation.

Problem 3:

Find the sum of **681 mL + 7.8 L**. Write your answer in standard notation.

Problem 4:

Find the sum of **7479 mm + 285 cm + 27.6 m**

Problem 5:

Find the difference of **4 ft 8 in − 3 ft 2 in**.

Problem 6:

Find the difference of **6 lb 7 oz − 2 lb 9 oz**.

Problem 7:

Find the difference of **3.786 kg − 455 mg**.

Problem 8:

Multiply **13 gal 1 qt** by **6**. Write your answer in standard notation.

Problem 9:

Multiply **3.8 m** by **9**. Write your answer in standard notation.

Problem 10:

Multiply **3 mi** by **5 mi**

Problem 11:

Multiply **4 ft** by **10 in**

Problem 12:

Multiply **4 m** by **1 m** by **5 m**

Problem 13:

Divide **12 gal 2 qt** by **6**.

Problem 14:

Divide **11 gal 3 qt 1 pt** by **3**.

Problem 15:

Divide **150 cm** by **6**.

Problem 16:

Divide **12 gal** by **6 gal**.

Problem 17:

Divide **3.6 lb** by **9 lb**. Write your answer in standard notation.

Problem 18:

Divide **340 kg** by **5 kg**.

Use the following approximations in Problems 19-24:

NOTE: The symbol ≈ means "approximately equal to".

1 cm ≈ 0.3937 in

1 m ≈ 39.37 in

1 km ≈ 0.6214 mi

1 g ≈ 0.0353 oz

1 kg ≈ 2.2046 lb

1 mL ≈ 0.034 oz

1 L ≈ 1.0567 qt

Problem 19:

Change *33 cm* to *inches*. Round your answer to 2 decimal places.

Problem 20:

Change *33 in* to *centimeter*. Round your answer to 2 decimal places.

Problem 21:

Change *3.4 lb* to *kilograms*. Round your answer to two decimal places.

Problem 22:

Change *10,000 cc* to *ounces*.

Problem 23:

Change *52 feet* to *meters*. Round your answer to two decimal places.

Problem 24:

Change *2.5 kilograms* to *pounds*. Round your answer to two decimal places.

SOLUTIONS
You can find detailed solutions below the link for this problem set!

1. 1 yd 1 ft 5 in	2. 11 lb 4 oz	3. 8.481 L
4. 37.929 m	5. 1 ft 6 in	6. 3 lb 14 oz
7. 3.785545 kg	8. 79 gal 2 qt	9. 34.2 m
10. 15 mi^2	11. 480 in^2	12. 20 m^3
13. 2 gal $\frac{1}{3}$ qt	14. 3 gal 3 qt 1 pt 10$\frac{2}{3}$ oz	15. 25 cm
16. 2	17. 0.4	18. 68
19. 12.99 in	20. 83.82 cm	21. 1.54 kg
22. 340 oz	23. 15.85 m	24. 5.51 lb