

Estimating Sums

Sometimes we don't need an exact answer to a problem. We only need to estimate the answer. For example, approximately how many gallons of gasoline are stored in these two tanks?

We want an estimate of the total number of gallons in both tanks.

Tank number 1 contains _____ gallons of gasoline.

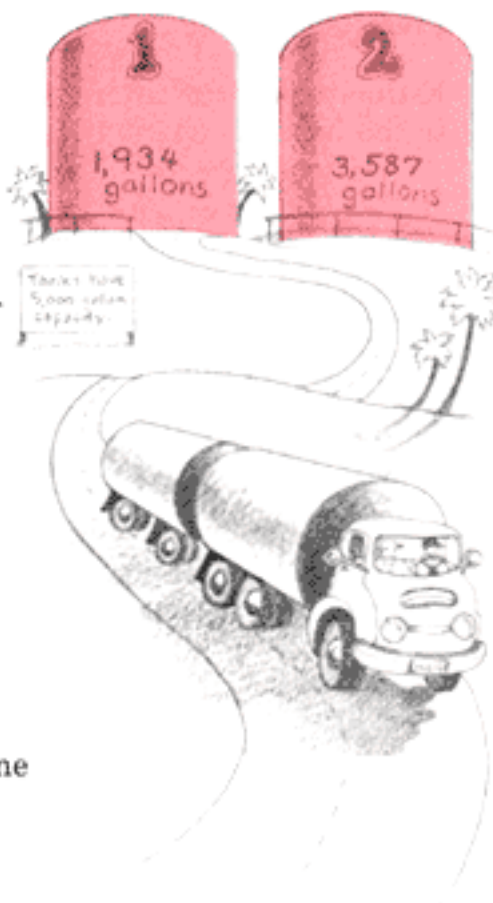
Tank number 2 contains _____ gallons.

To estimate the sum, we can round each addend to the nearest thousand, and add these rounded numbers.

1,934 is rounded to _____.

3,587 is rounded to _____.

There are about _____ gallons of gasoline stored in the two tanks.



Getting Started

Estimate the sum after rounding each addend to the nearest ten.

$$\begin{array}{r} 1. \quad 56 \\ + 87 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 34 \\ + 415 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 163 \\ + 589 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 3,019 \\ + 2,936 \\ \hline \end{array}$$

Estimate the sum after rounding each addend to the nearest hundred.

$$\begin{array}{r} 5. \quad 368 \\ + 526 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 1,946 \\ + 758 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 968 \\ + 412 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 3,750 \\ + 1,895 \\ \hline \end{array}$$

Estimate the sum after rounding each addend to the nearest thousand.

$$\begin{array}{r} 9. \quad 5,260 \\ + 1,680 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 8,576 \\ + 2,750 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 6,749 \\ + 7,284 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 8,500 \\ + 3,850 \\ \hline \end{array}$$

**Practice**

Estimate the sum after rounding each addend to the nearest ten.

1.
$$\begin{array}{r} 23 \\ + 58 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 59 \\ + 16 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 275 \\ + 88 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 546 \\ + 682 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 7,367 \\ + 4,431 \\ \hline \end{array}$$

Estimate the sum after rounding each addend to the nearest hundred.

6.
$$\begin{array}{r} 393 \\ + 167 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 485 \\ + 836 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 1,941 \\ + 287 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 1,755 \\ + 4,628 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 2,808 \\ + 1,576 \\ \hline \end{array}$$

Estimate the sum after rounding each addend to the nearest thousand.

11.
$$\begin{array}{r} 3,965 \\ + 2,646 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 8,397 \\ + 6,845 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 5,545 \\ + 7,851 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 4,096 \\ + 9,850 \\ \hline \end{array}$$

Copy and Do

15. $73 + 86$

16. $93 + 18$

17. $27 + 76$

18. $41 + 88$

19. $375 + 916$

20. $876 + 652$

21. $248 + 796$

22. $850 + 525$

23. $5,964 + 8,572$

24. $8,863 + 1,650$

25. $9,452 + 3,925$

26. $229 + 4,076$

Apply

Solve these problems.

27. One storage tank can hold 4,246 gallons of gasoline. Another tank can hold 3,575 gallons. About how many gallons of gasoline can both tanks hold?

28. It is 1,717 miles from Albany, New York to Dallas, Texas. Dallas is another 2,151 miles from Seattle, Washington. About how far is it from Albany to Seattle, if you drive through Dallas?