

Problem Solving

Skill 5 - 4D

Multiply Whole Numbers

Estimate.

Waterworks water ride park has an average of 31,648 visitors each week. About how many people visit the park in 19 weeks?

$\begin{array}{r} 31,648 \\ \times 19 \\ \hline \end{array}$	round each factor $\begin{array}{r} 30,000 \\ \times 20 \\ \hline \end{array}$	use mental math to estimate $2 \times 3 = 6$	count the zeros $20 \times 30,000$ add 5 zeros about 600,000
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Estimate to find the most reasonable answer.

1. Mr. Johnson traveled 248 miles per day for 29 days. About how many miles did he travel in all?
2. There are 5,280 feet in one mile. Estimate to find how many feet are in 35 miles?
3. Jared ran 350 yards per day for 12 days. About how many yards did he run in all?

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Multiply Whole Numbers

Directions: Estimate to find the most reasonable answer.

4. A business needs to buy 32 trucks. Each truck cost \$23,562. About how much money will the business need to purchase all of the trucks?
5. Karen has summer job at a skating rink. She earns \$5.87 per hour. She works 37 hours per week. About how much does she earn in one week?
6. Miguel spent \$47.35 at the mall. Steven spent 9 times more than Miguel. About how much did Steven spend?
7. If a business needs \$3,527 per day to meet expenses, about how much will the business need in 29 days?
8. Cindy is filling a bottle with 895 cubic centimeters of water. If she fills the bottle 25 times with water, about how many cubic centimeters of water will she need?

Answer Key
Skill 5 - 4D

1.

$\begin{array}{r} 248 \\ \times 29 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 200 \\ \times 30 \\ \hline \end{array}$	<p>use mental math to estimate</p> $3 \times 2 = 6$	<p>count the zeros</p> <p>add 3 zeros</p> 6000
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2.

$\begin{array}{r} 5,280 \\ \times 35 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 5,000 \\ \times 40 \\ \hline \end{array}$	<p>use mental math to estimate</p> $4 \times 5 = 20$	<p>count the zeros</p> <p>add 4 zeros</p> $200,000$
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3.

$\begin{array}{r} 350 \\ \times 12 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 400 \\ \times 10 \\ \hline \end{array}$	<p>use mental math to estimate</p> $1 \times 4 = 4$	<p>count the zeros</p> <p>add 3 zeros</p> $4,000$
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4.

$\begin{array}{r} \$23,562 \\ \times 32 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 20,000 \\ \times 30 \\ \hline \end{array}$	<p>use mental math to estimate</p> $3 \times 2 = 6$	<p>count the zeros</p> <p>add 5 zeros</p> $\$600,000$
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5.

$\begin{array}{r} \$5.87 \\ \times 37 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 6.00 \\ \times 40 \\ \hline \end{array}$	<p>use mental math to estimate</p> $4 \times 6 = 24$	<p>count the zeros</p> <p>add 1 zero plus 2 zeros after the decimal</p> $\$240.00$
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6.

$\begin{array}{r} 47.35 \\ \times 9 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 50.00 \\ \times 9 \\ \hline \end{array}$	<p>use mental math to estimate</p> $9 \times 5 = 45$	<p>count the zeros</p> <p>add 2 zeros after the decimal</p> $\$450.00$
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7.

$\begin{array}{r} \$3,527 \\ \times 29 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 4,000 \\ \times 30 \\ \hline \end{array}$	<p>use mental math to estimate</p> $3 \times 4 = 12$	<p>count the zeros</p> <p>add 4 zeros</p> $\$120,000$
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8.

$\begin{array}{r} 895 \\ \times 25 \\ \hline \end{array}$	<p>round each factor</p> $\begin{array}{r} 900 \\ \times 30 \\ \hline \end{array}$	<p>use mental math to estimate</p> $3 \times 9 = 27$	<p>count the zeros</p> <p>add 3 zeros</p> $27,000$
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