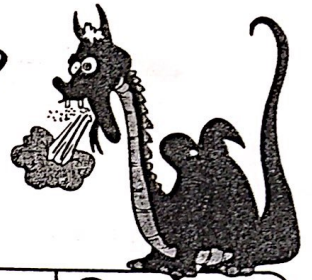


Why Aren't Dragons Hungry on Weekends?



Find each answer in the adjacent answer column. Write the letter of the answer in the box containing the number of the exercise.

In exercises 1-12, write the prime factorization of the given number.

<p>1</p> $ \begin{array}{c} 28 \\ \swarrow \searrow \\ 4 \quad 7 \\ \swarrow \searrow \quad \swarrow \searrow \\ 2 \quad 2 \quad 7 \\ \mathbf{2^2 \cdot 7} \end{array} $	<p>2</p> $ \begin{array}{c} 45 \\ \swarrow \searrow \\ 5 \quad 9 \\ \quad \swarrow \searrow \\ \quad 3 \quad 3 \\ \mathbf{3^2 \cdot 5} \end{array} $	<p>3</p> $ \begin{array}{c} 88 \\ \swarrow \searrow \\ 8 \quad 11 \\ \swarrow \searrow \quad \swarrow \searrow \\ 4 \quad 2 \quad 11 \\ \swarrow \searrow \quad \swarrow \searrow \\ 2 \quad 2 \quad 2 \quad 11 \\ \mathbf{2^3 \cdot 11} \end{array} $	<p>V $3^2 \cdot 7$</p> <p>B $2^3 \cdot 11$</p> <p>Y $2^2 \cdot 7$</p> <p>L $2^3 \cdot 3$</p> <p>A $3^2 \cdot 5$</p>
<p>4</p> $ \begin{array}{c} 100 \\ \swarrow \searrow \\ 10 \quad 10 \\ \swarrow \searrow \quad \swarrow \searrow \\ 2 \quad 5 \quad 2 \quad 5 \\ \mathbf{2^2 \cdot 5^2} \end{array} $	<p>5</p> $ \begin{array}{c} 170 \\ \swarrow \searrow \\ 17 \quad 10 \\ \quad \swarrow \searrow \\ \quad 2 \quad 5 \\ \mathbf{2 \cdot 5 \cdot 17} \end{array} $	<p>6</p> $ \begin{array}{c} 81 \\ \swarrow \searrow \\ 9 \quad 9 \\ \swarrow \searrow \quad \swarrow \searrow \\ 3 \quad 3 \quad 3 \quad 3 \\ \mathbf{3^4} \end{array} $	<p>7 $2 \cdot 5 \cdot 17$</p> <p>G $2^3 \cdot 11$</p> <p>K 3^4</p> <p>H $2^2 \cdot 5^2$</p> <p>R $2 \cdot 3^2 \cdot 5$</p>
<p>7</p> $ \begin{array}{c} 144 \\ \swarrow \searrow \\ 12 \quad 12 \\ \swarrow \searrow \quad \swarrow \searrow \\ 4 \quad 3 \quad 4 \quad 3 \\ \swarrow \searrow \quad \swarrow \searrow \\ 2 \quad 2 \quad 2 \quad 2 \quad 3 \quad 3 \\ \mathbf{2^4 \cdot 3^2} \end{array} $	<p>8</p> $ \begin{array}{c} 650 \\ \swarrow \searrow \\ 65 \quad 10 \\ \swarrow \searrow \quad \swarrow \searrow \\ 5 \cdot 13 \quad 5 \cdot 2 \\ \mathbf{2 \cdot 5^2 \cdot 13} \end{array} $	<p>9</p> $ \begin{array}{c} 147 \\ \swarrow \searrow \\ 3 \quad 49 \\ \quad \swarrow \searrow \\ \quad 7 \quad 7 \\ \mathbf{3 \cdot 7^2} \end{array} $	<p>M $2^3 \cdot 13$</p> <p>C $2 \cdot 5^2 \cdot 13$</p> <p>U $2 \cdot 5 \cdot 19$</p> <p>N $3 \cdot 7^2$</p> <p>F $2^4 \cdot 3^2$</p>
<p>10</p> $ \begin{array}{c} 64 \\ \swarrow \searrow \\ 8 \quad 8 \\ \swarrow \searrow \quad \swarrow \searrow \\ 4 \quad 2 \quad 4 \quad 2 \\ \swarrow \searrow \quad \swarrow \searrow \\ 2 \quad 2 \quad 2 \quad 2 \quad 2 \quad 2 \\ \mathbf{2^6} \end{array} $	<p>11</p> $ \begin{array}{c} 135 \\ \swarrow \searrow \\ 5 \quad 27 \\ \quad \swarrow \searrow \\ \quad 3 \quad 3 \\ \quad \swarrow \searrow \\ \quad 3 \quad 3 \\ \mathbf{3^3 \cdot 5} \end{array} $	<p>12</p> $ \begin{array}{c} 250 \\ \swarrow \searrow \\ 25 \quad 10 \\ \swarrow \searrow \quad \swarrow \searrow \\ 5 \quad 5 \quad 2 \quad 5 \\ \mathbf{2 \cdot 5^3} \end{array} $	<p>K $2 \cdot 5^3$</p> <p>S 2^6</p> <p>P $2^4 \cdot 3$</p> <p>A $3^3 \cdot 5$</p> <p>D $2 \cdot 3 \cdot 5^2$</p>

22 pts

In exercises 13-22, write the product.

<p>13 $2 \cdot 2 \cdot 2 \cdot 3 \cdot x$ $\mathbf{24x}$</p> <p>14 $2 \cdot 5 \cdot 5 \cdot x \cdot x$ $\mathbf{50x^2}$</p> <p>15 $3 \cdot 3 \cdot 7 \cdot x \cdot y \cdot y \cdot y \cdot y$ $\mathbf{63xy^4}$</p> <p>16 $-1 \cdot 2 \cdot 2 \cdot 11 \cdot x \cdot x \cdot x \cdot y$ $\mathbf{-44x^3y}$</p> <p>17 $-1 \cdot 5 \cdot 19 \cdot x \cdot x \cdot y \cdot y \cdot y$ $\mathbf{-95x^2y^3}$</p>	<p>O $50x^2$</p> <p>E $-95x^2y^3$</p> <p>R $-48x^2y$</p> <p>Y $24x$</p> <p>I $63xy^4$</p> <p>B $-85x^2y^4$</p> <p>H $-44x^3y$</p>	<p>18 $2 \cdot 5^2 \cdot a^2$ $\mathbf{50a^2}$</p> <p>19 $-1 \cdot 3^4 \cdot a \cdot b^3$ $\mathbf{-81ab^3}$</p> <p>20 $2^3 \cdot 7 \cdot a^2 \cdot b^2$ $\mathbf{56a^2b^2}$</p> <p>21 $-1 \cdot 5^4 \cdot a^5 \cdot b$ $\mathbf{-625a^5b}$</p> <p>22 $3^2 \cdot 11 \cdot a^2 \cdot b^4$ $\mathbf{99a^2b^4}$</p>	<p>W $-625a^5b$</p> <p>L $99a^2b^2$</p> <p>F $50a^2$</p> <p>N $99a^2b^4$</p> <p>S $56a^2b^2$</p> <p>E $-625ab^3$</p> <p>T $-81ab^3$</p>
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5 T 16 H 7 E 13 Y 18 F 3 E 11 A 20 S 1 T 14 O 9 N 21 W 17 E 2 A 6 K 12 K 22 N 15 I 8 G 4 H 19 T 10 S