simplify the expression. Select your answer from the multiple choice options. Find the letter of the problem in the grid and color it with the color that matches the answer.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | J |  |  |  | J | J | J | 0 | 0 | M | 0 | 0 | 0 | 0 | o | Q | Q | Q |  | Q | Q |  | E |  |  |  |  |  |  |  |
|  | J |  |  | M |  |  |  | 0 | M | M | M | 0 | 0 |  |  | Q | Q |  |  | Q |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 0 | M |  | 0 | 0 |  |  | Q | Q |  |  | Q |  |  |  |  |  |  |  |  |  |  |
|  | J |  |  |  | J | J | J | 0 | 0 | 0 |  | 0 | 0 | 0 |  | Q | Q | Q |  | Q | Q |  |  |  |  |  |  |  |  |  |
|  | J |  |  |  | J J | J | J | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Q | Q |  |  | Q | Q |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | N | N |  |  | A | A |  |  | K | K |  |  | K |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | N | N | A |  | A |  |  |  | K | R |  |  | K | R |  |  |  | N |  |  |  |  |  |
|  | P |  |  |  |  |  |  | N | A | 1 | 1 | A | 1 |  |  | K | G | G |  | K | G |  |  |  | N |  | c |  |  |  |
|  | P |  |  |  | P F | F |  | A | 1 | 1 |  | A | 1 |  |  | K | G | G |  | K | G |  |  |  | B |  | B |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | A | A |  |  | K | K |  |  | K | K |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | L | L |  | A |  |  |  | K | R |  |  | K | R |  |  |  | B |  | B |  |  |  |
|  |  |  |  |  |  |  |  |  | 1 | 1 |  | A | 1 |  |  | K | G | G |  | K | G |  |  |  | B |  | B |  |  |  |
|  | P |  |  |  | F F |  |  | A | 1 | 1 |  |  |  |  |  | K | G | G |  | K | G |  |  |  | B |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | A |  |  |  | A |  |  | K | K |  |  | K | K |  |  |  | B |  | B |  |  |  |
|  |  |  |  |  |  |  |  |  |  | L |  |  |  |  |  | K | R |  |  | K | R |  |  |  | B |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | K | G |  |  | K |  |  |  |  | B |  |  |  |  |  |
|  | T |  |  |  | F F |  |  | L | L | A |  | A | 1 |  |  | K | G | G | R | K | G |  | R |  | B |  | B |  |  |  |
|  |  |  |  |  |  |  |  |  | L |  |  |  | A |  |  | K | K |  |  | K | K |  |  |  | B |  | B |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | R |  |  | R | R |  | B |  | B |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | F | F |  | L | L |  |  | R | R |  |  | R | R |  |  |  | B |  |  |  |  |  |
|  |  |  |  |  | F |  |  | F | F | F |  | D | D |  |  | D | D |  |  | D |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  | 5 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | B | B |  |  | B |  |  | S | S |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Problem | Answer selection | Problem | Answer selection |
| :---: | :---: | :---: | :---: |
| A $8^{6} \div 8^{7}$ | $8^{13}$ Light brown | D $\left(7^{8}\right)^{3}$ | $7{ }^{\mathbf{2 4}}$ Pink |
|  | $8{ }^{1}$ Dark blue |  | 711 Light brown |
|  | $8^{-1} \quad$ Light yellow |  | $7{ }^{5} \quad$ Purple |
| B $9^{8} \div 9^{4}$ | $9^{4} \quad$ Pink | E $\quad\left(5^{6}\right)^{4}$ | $5^{2}$ Light yellow |
|  | 9-4 White |  | $5{ }^{24}$ Light blue |
|  | $9^{12} \quad$ Purple |  | $5^{10} \quad$ White |
| C $6^{5} \times 6^{2}$ | $6^{10}$ Light yellow | F $2^{6} \times 2^{7}$ | $2^{42} \quad$ Purple |
|  | $6^{7}$ Dark blue |  | $2^{13} \quad$ Pink |
|  | $6^{3} \quad$ Purple |  | $2^{-1} \quad$ White |

## Laws of Exponents Color by Code

simplify the expression. Select your answer from the multiple choice options. Find the letter of the problem in the grid and color it with the color that matches the answer.

| G $8^{4} \times 8^{9}$ | $8^{13}$ | Light brown | N $4^{5} \div 4^{3}$ | $4^{8}$ | Dark Brown |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $8^{36}$ | Purple |  | $4^{2}$ | Dark blue |
|  | 8-5 | Light blue |  | $4^{-2}$ | Light brown |
| H $9^{3} \div 9^{9}$ | $9^{-6}$ | Purple | $0 \quad 5^{7} \div 5^{8}$ | $5^{-1}$ | Light blue |
|  | $9^{6}$ | Dark blue |  | $5{ }^{15}$ | White |
|  | $9^{12}$ | White |  | $5{ }^{1}$ | Dark Brown |
| $\left.1{ }^{(57}\right)^{4}$ | $5^{28}$ | Light brown | P $3^{5} \times 3^{3}$ | $3^{2}$ | Pink |
|  | $5^{11}$ | Purple |  | $3^{15}$ | Light yellow |
|  | $5{ }^{3}$ | Pink |  | $3^{8}$ | Dark blue |
| J $9^{3} \div 9^{4}$ | 9-1 | Light blue | Q $\left(7^{5}\right)^{6}$ | $7^{11}$ | Dark blue |
|  | $9^{1}$ | Dark blue |  | 7-1 | Dark Brown |
|  | $9{ }^{7}$ | Pink |  | $7^{30}$ | Light blue |
| $\mathrm{K} \quad\left(5^{2}\right)^{9}$ | $5^{11}$ | White | R $\mathbf{2}^{\mathbf{2}} \div \mathbf{2}^{\mathbf{8}}$ | $2^{10}$ | Light brown |
|  |  | Light yellow |  | $2^{6}$ | Light yellow |
|  | 5-7 | Light brown |  | $2^{-6}$ | Dark Brown |
| $L \quad\left(2^{6}\right)^{2}$ | $2^{4}$ | Light brown | $S \quad 7^{9} \div 7^{4}$ | $7{ }^{5}$ | Purple |
|  | $2^{12}$ | Dark Brown |  | 7-5 | Light brown |
|  | $2^{8}$ | Pink |  | $7{ }^{13}$ | Dark Brown |
| M $2^{3} \times 2^{2}$ | $2^{5}$ | White | T $9^{4} \times 9^{4}$ | $9^{16}$ | Light blue |
|  |  | Dark blue |  | 1 | White |
|  | $2^{-1}$ | Dark Brown |  | $9^{8}$ | Purple |

