

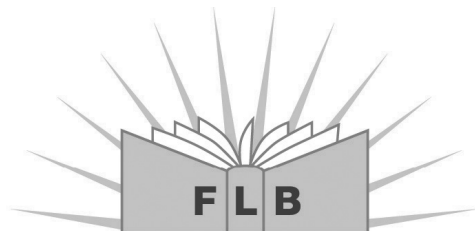
EDUREALM SERIES

A Standards-Based Resource

MATHEMATICS

Student Practice Book

LEVEL F



Firelight Books

SAMPLE
EDUREALM F

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ORDER OF OPERATIONS

In this lesson, we will answer equations using the proper order of operations. Follow this order when more than one step is involved in solving an equation.

- Work parentheses first.
- Work exponents next.
- Do all multiplication and division from left to right.
- Do all addition and subtraction from left to right.

Solve each equation. Show your work.

Example

$$45 \div (4^2 - 1) = \underline{\hspace{2cm}}$$

First, work inside the parentheses.

$$45 \div (4^2 - 1)$$

Using the correct order of operations, work the exponent.

$$45 \div (16 - 1)$$

Work the rest of the parentheses.

$$45 \div 15$$

Finish the problem.

3

$$45 \div (4^2 - 1) = \underline{3}$$

1. $9 \times (41 + 3^2) = \underline{\hspace{2cm}}$

5. $200 \div (15 \div 3) + 9 = \underline{\hspace{2cm}}$

2. $5 \times (12 + 5^2) = \underline{\hspace{2cm}}$

6. $(120 \div 2^3) - (3 \times 5) = \underline{\hspace{2cm}}$

3. $(12 \times 5^2) + 51 = \underline{\hspace{2cm}}$

7. $(32 - 6) \times (40 - 40) = \underline{\hspace{2cm}}$

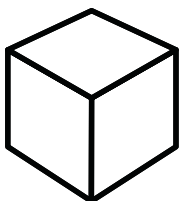
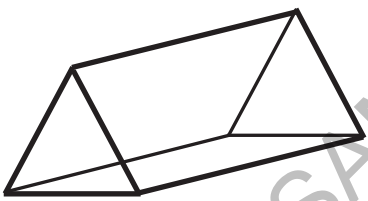
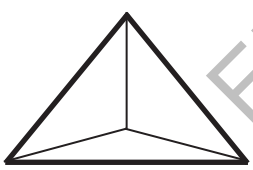
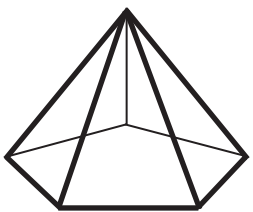
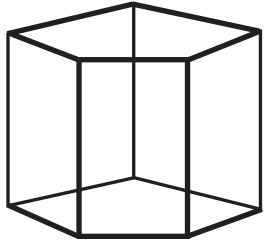
4. $(15 \times 5) + 25 = \underline{\hspace{2cm}}$

8. $160 \div (8 + 4 + 8) \times 6^2 = \underline{\hspace{2cm}}$

SIDES, CORNERS, VERTICES, EDGES

A polyhedron is a solid three-dimensional shape with flat faces (from Greek poly- meaning "many" and -edron meaning "face"). All polyhedrons have faces, edges, and vertices. A face is a flat surface of a shape. An edge is where two faces meet, and a vertex is the point where three or more edges meet.

Complete the chart with the number of faces, vertices, and edges of each shape.

Object	Faces	Vertices	Edges
Ex: 	6	8	12
1. 			
2. 			
3. 			
4. 			

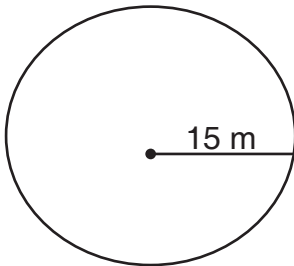
CIRCUMFERENCE

The circumference of a circle is the measurement of the distance around the outer edge of the circle. When given the radius or the diameter of a circle, use these two formulas to find the circumference.

$$C = d \times \pi \quad \text{or} \quad C = 2 \times r \times \pi$$

Find the circumference of each circle. Show your work. Round all answers to the nearest hundredth.

Ex:

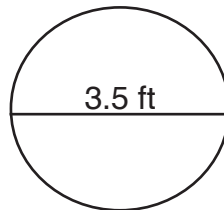


$$C = 2 \times r \times \pi$$

$$C = 2 \times 15 \times 3.14$$

$$C = 94.2 \text{ m}$$

1.

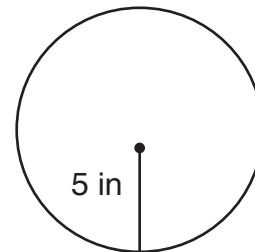


$$C = \underline{\hspace{2cm}}$$

$$C = \underline{\hspace{2cm}}$$

$$C = \underline{\hspace{2cm}}$$

2.



$$C = \underline{\hspace{2cm}}$$

$$C = \underline{\hspace{2cm}}$$

$$C = \underline{\hspace{2cm}}$$

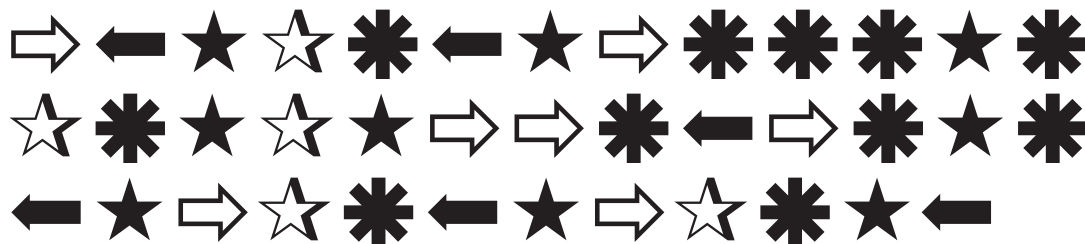
Apply what you know.

3. Marco rides his bicycle around the neighborhood lake. The diameter of the lake is two miles. How far does Marco ride? _____
4. Iris bought a kit to make a clock. When she finished the clock, she decided to add some gold trim around the outer edges. Her clock has a radius of eight inches. How many inches of gold trim does Iris need to go around the clock? _____
5. Mrs. Rico wants to plant flowers around her daughter's circular wading pool. The pool is five feet across. Mrs. Rico wants to plant a flower about every 18 inches around the pool. How many flowers does Mrs. Rico need? Round your answer to the nearest whole number. _____

RATIOS

A ratio is a comparison of two related numbers.

A ratio can be written one of three ways: $\frac{2}{3}$ 2:3 2 to 3



Write each ratio three ways.

Ex: What is the ratio of * to ⇨? $\frac{11}{7}$ 11:7 11 to 7

1. What is the ratio of ⇐ to ⇨? _____
2. What is the ratio of * to ☆? _____
3. What is the ratio of ★ to ⇨? _____
4. What is the ratio of ☆ to all stars? _____
5. What is the ratio of ⇨ to ★? _____
6. What is the ratio of * to ⇐? _____
7. What is the ratio of ☆ to ⇐? _____
8. What is the ratio of ★ to *? _____
9. What is the ratio of all arrows to all stars? _____
10. Predict the next symbol in the list. _____

BY MULTIPLES OF TEN OR MORE

Multiplying is another way of adding equal groups. The numbers you are multiplying are called factors. The answer is the product.

Find the products.

Example

$$\begin{array}{r} 445 \\ \times 10 \\ \hline 4,450 \end{array}$$

$$\begin{array}{r} 1. \quad 3,817 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 3,713 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 3,708 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 7,462 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 5,105 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 3,475 \\ \times 80 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 7,937 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 5,831 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 6,243 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 9,367 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 7,881 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 4,556 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 5,434 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 4,599 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 1,133 \\ \times 80 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 6,384 \\ \times 60 \\ \hline \end{array}$$

Apply what you know.

17. A businessman travels 1,656 miles ten times a month between the cities of Baton Rouge and New York. How many miles does he travel in a month? _____

18. How many miles does he travel in a year? _____