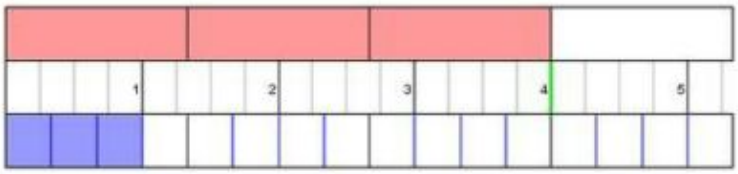
ASSESSMENT QUESTIONS:

Back to Assessment Questions | Print Page

RESULTS NOT SAVED	Q1	Q2	Q3	Q4	Q5	SCORE
Your Results:	✔	✔	✔	✔	✔	5/5

Questions, Answers, and Explanations:

1. What is $3 \div \frac{3}{4}$? Use the model below to help, if you like.



- **A.** 2.25
- **B.** 3
- **C.** 4
- **D.** 12

Correct Answer: C - 4

Explanation: If you place models of $\frac{3}{4}$ end to end, it would take 4 models to cover the entire length of the model of 3. There are four groups of $\frac{3}{4}$ in 3.

You answered this question correctly!

↑ Results Summary

2. What is $2 \div \frac{1}{8}$?

- **A.** $\frac{1}{16}$

- **B.** $\frac{1}{4}$
- **C.** 4
- **D.** 16

Correct Answer: D - 16

Explanation: $2 \div \frac{1}{8}$ is equal to 16. If you placed 8 models of the fraction $\frac{1}{8}$ end to end, their total length would be 1 unit long. Therefore, 16 models of the $\frac{1}{8}$ placed end to end would be 2 units long. This shows that the whole number 2 can be evenly divided into 16 parts of $\frac{1}{8}$ each, and that $2 \div \frac{1}{8} = 16$.

You answered this question correctly!

Results Summary

3. What is $2\frac{1}{2} \div \frac{1}{2}$?

- **A.** $\frac{3}{4}$
- **B.** 2
- **C.** $4\frac{1}{2}$
- **D.** 5

Correct Answer: D - 5

Explanation: $2\frac{1}{2} \div \frac{1}{2}$ is equal to 5. If you placed 5 models of the fraction $\frac{1}{2}$ end to end, their total length would be $2\frac{1}{2}$ units. Therefore, $2\frac{1}{2}$ can be evenly divided into 5 parts of $\frac{1}{2}$ each.

You answered this question correctly!

Results Summary

4. What is $\frac{7}{4} \div \frac{3}{4}$?

- **A.** $1\frac{5}{16}$

- **B.** 2
- **C.** $2\frac{1}{4}$
- **D.** $2\frac{1}{3}$

Correct Answer: D - $2\frac{1}{3}$

Explanation: $\frac{7}{4} \div \frac{3}{4} = 2\frac{1}{3}$. Using fraction models, you can show that 2 models of the fraction $\frac{3}{4}$ placed end to end have a total length of $\frac{6}{4}$. This leaves a remainder of $\frac{1}{4}$. $\frac{1}{4}$ is $\frac{1}{3}$ of the divisor, $\frac{3}{4}$. Therefore, $\frac{7}{4} \div \frac{3}{4} = 2\frac{1}{3}$. You could also calculate this quotient by multiplying $\frac{7}{4}$ by the reciprocal of $\frac{3}{4}$: $\frac{7}{4} \cdot \frac{4}{3} = \frac{7}{3}$ or $2\frac{1}{3}$.

You answered this question correctly!

Results Summary

5. Dividing a number by $\frac{1}{2}$ will have the same result as multiplying it by:

- **A.** $\frac{1}{2}$
- **B.** 1
- **C.** 2
- **D.** 0.5

Correct Answer: C - 2

Explanation: Dividing a number by $\frac{1}{2}$ will have the same result as multiplying it by 2. To find a quotient when the divisor is a fraction, you multiply the dividend by the reciprocal of the divisor. Since the reciprocal of $\frac{1}{2}$ is $\frac{2}{1}$ or 2, dividing a number by $\frac{1}{2}$ is the same as multiplying it by 2. Similarly, multiplying a number by $\frac{1}{2}$ is the same as dividing it by 2.

You answered this question correctly!

Results Summary

Gizmos - Dividing Fractions

Date

No

1. $3 \div \frac{3}{4} = \frac{3}{1} \times \frac{4}{3} = \frac{12}{3} = 3\overline{)12}^{\,4} = 4$

$-\frac{12}{0}$

2. $2 \div \frac{1}{8} = \frac{2}{1} \times \frac{8}{1} = \frac{16}{1} = 16$

3. $2\frac{1}{2} \div \frac{1}{2} = \frac{5}{2} \times \frac{2}{1} = \frac{10}{2} = 2\overline{)10}^{\,5} = 5$

-10

4. $\frac{7}{4} \div \frac{3}{4} = \frac{7}{4} \times \frac{4}{3} = \frac{28}{12} = 12\overline{)28}^{\,2} = 2\frac{1}{3}$

$-\frac{24}{4}$