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$\begin{array}{l}
 \vdash A \triangle B \quad \vdash A \triangle C \quad \vdash A \triangle D \quad \vdash A \triangle E \quad \vdash A \triangle F \quad \vdash A \triangle G \quad \vdash A \triangle H \quad \vdash A \triangle I \quad \vdash A \triangle J \\
 \vdash A \triangle K \quad \vdash A \triangle L \quad \vdash A \triangle M \quad \vdash A \triangle N \quad \vdash A \triangle O \quad \vdash A \triangle P \quad \vdash A \triangle Q \quad \vdash A \triangle R \quad \vdash A \triangle S
 \end{array}$

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The diagrams show the following steps:

- $18 \div 12 = 1$ remainder 6
- $12 \div 6 = 2$ remainder 0
- $6 \div 6 = 1$ remainder 0

The final result is $\text{GCD}(12, 18) = 6$.

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The diagrams illustrate the steps of the Euclidean algorithm for finding the GCD of 12 and 18. The steps are as follows:

- Initial numbers: 12 and 18.
- Divide 18 by 12, remainder 6.
- Divide 12 by 6, remainder 0.
- Divide 6 by 6, remainder 0.
- Final result: 6.

$\vdash \Delta \vdash A$

The diagrams show the following steps:

- $18 \div 12 = 1$ with remainder 6.
- $12 \div 6 = 2$ with remainder 0.
- The GCD is 6.

$\begin{array}{ccccccc} \text{+} & \text{A} & \triangle & \text{+} & \text{A} & \triangle & \text{+} & \text{A} & \triangle & \text{+} & \text{A} & \triangle & \text{+} & \text{A} & \triangle & \text{+} & \text{A} & \triangle \\ & \circ & & & \circ & & & \circ & & & \circ & & & \circ & & & \circ & & \end{array}$

The diagrams illustrate the steps of the Euclidean algorithm for finding the GCD of 12 and 18. The steps are as follows:

- Initial state: Two separate blocks, one labeled 12 and one labeled 18.
- Step 1: The 18 block is divided into one 12 block and a remainder of 6.
- Step 2: The 12 block is divided into two 6 blocks.
- Step 3: The 6 block is divided into one 6 block and a remainder of 0.
- Step 4: The final state shows three 6 blocks, indicating that the GCD is 6.

$\triangle \nabla \triangle$
 $\triangle \perp \triangle \triangle \triangle$
 $\triangle \neg \triangle$
 $\neg \triangle$
 $\triangle \neg \triangle$
 $\triangle \neg \triangle \triangle \triangle$
 $\neg \triangle \triangle$
 $\neg \triangle \triangle$

7. A sequence of 10 figures is shown. The first figure is a square with a diagonal line from the top-left corner to the bottom-right corner. The second figure is a square with a diagonal line from the top-right corner to the bottom-left corner. The third figure is a square with a diagonal line from the top-left corner to the bottom-right corner. The fourth figure is a square with a diagonal line from the top-right corner to the bottom-left corner. The fifth figure is a square with a diagonal line from the top-left corner to the bottom-right corner. The sixth figure is a square with a diagonal line from the top-right corner to the bottom-left corner. The seventh figure is a square with a diagonal line from the top-left corner to the bottom-right corner. The eighth figure is a square with a diagonal line from the top-right corner to the bottom-left corner. The ninth figure is a square with a diagonal line from the top-left corner to the bottom-right corner. The tenth figure is a square with a diagonal line from the top-right corner to the bottom-left corner.

$A \circ A \triangleleft A$ $A \triangleleft A \triangleleft A$ $A \vdash A + A \vdash A \triangleleft A \triangleleft A \vdash A$ $\Delta \circ A \triangleleft A + A \vdash \Delta \circ A \triangleleft A$

The diagrams show the construction of a triangle with a vertical line through its base. The steps are as follows:

- Draw a horizontal line segment (the base).
- Draw a vertical line segment passing through the midpoint of the base.
- Draw a circle centered at the midpoint of the base, intersecting the vertical line.
- Draw a circle centered at the top intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the bottom intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the top intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the bottom intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the top intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the bottom intersection of the vertical line and the circle from step 3, intersecting the base.
- Draw a circle centered at the top intersection of the vertical line and the circle from step 3, intersecting the base.

4. $\frac{1}{2} \times \frac{3}{4} = \frac{1 \times 3}{2 \times 4} = \frac{3}{8}$

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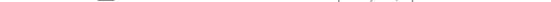
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$\frac{A}{B} \cdot \frac{C}{D} = \frac{AC}{BD}$

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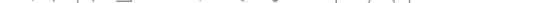
The diagrams show the following steps:

- $18 \div 6 = 3$ remainder 0
- $6 \div 3 = 2$ remainder 0
- $3 \div 2 = 1$ remainder 1
- $2 \div 1 = 2$ remainder 0
- $1 \div 0$ (undefined)
- $0 \div 1 = 0$ remainder 0
- $1 \div 0$ (undefined)
- $0 \div 1 = 0$ remainder 0
- $1 \div 0$ (undefined)
- $0 \div 1 = 0$ remainder 0

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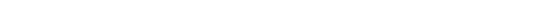
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