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unlabeled thousands place value chart

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unlabeled millions place value chart

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unlabeled hundred thousand place value chart

| millions | hundred thousands | ten thousands | thousands | hundreds | tens | ones |
|----------|-------------------|---------------|-----------|----------|------|------|
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millions place value chart

| thousands | hundreds | tens | ones |
|-----------|----------|------|------|
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thousands place value chart

| ten thousands | thousands | hundreds | tens | ones |
|------------------|-----------|----------|------|------|
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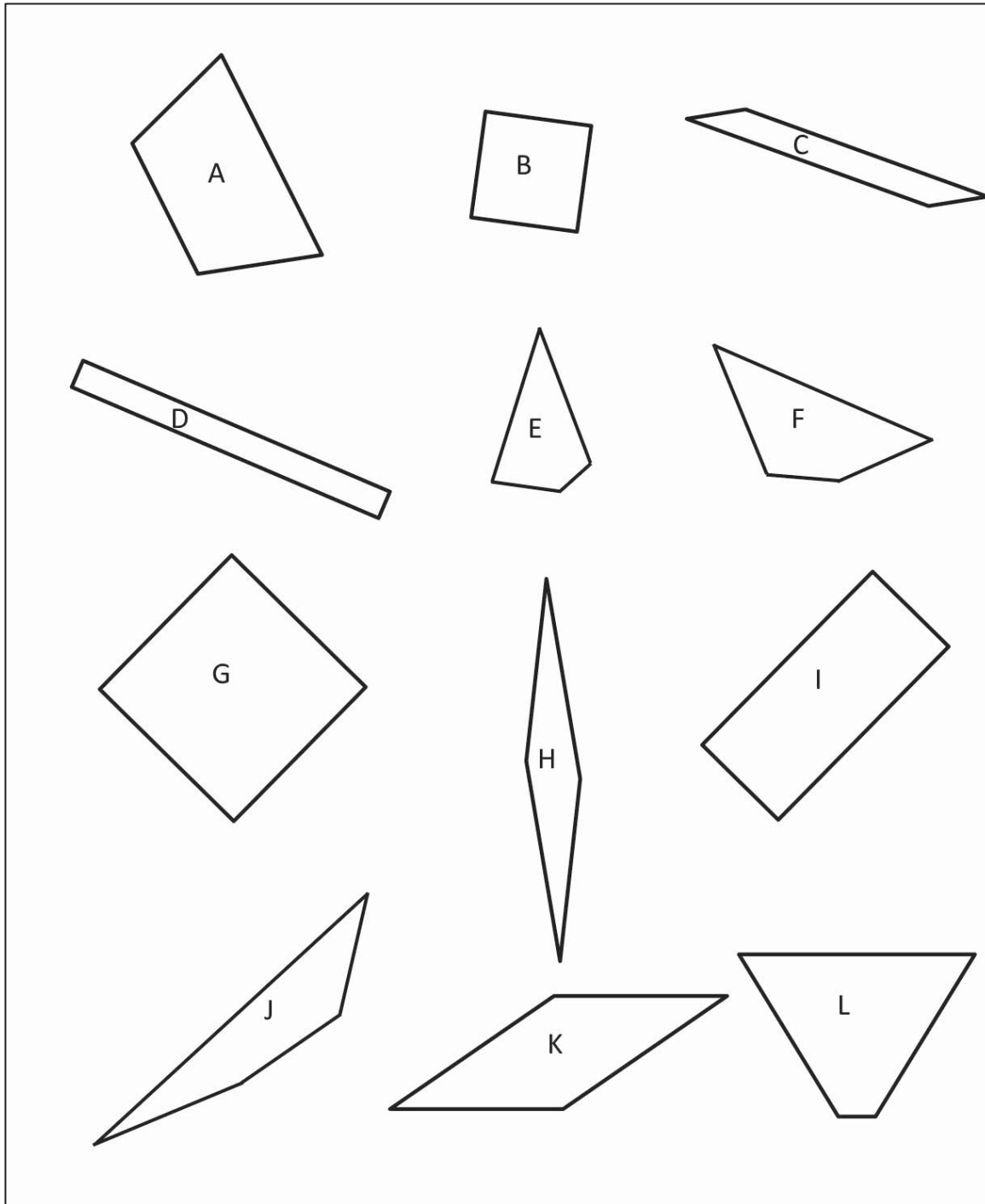
ten thousands place value chart

| | |
|------|--|
| ones | |
| tens | |

tens place value chart

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| ones | |
| tens | |
| hundreds | |
| thousands | |

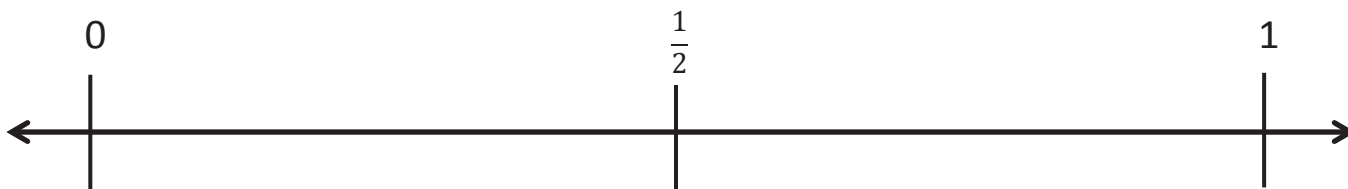
thousands place value chart for dividing



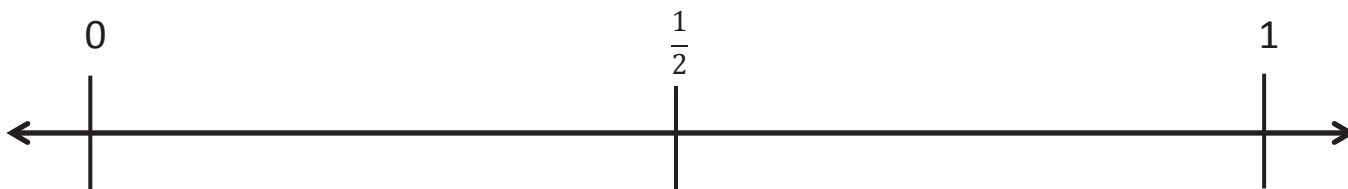
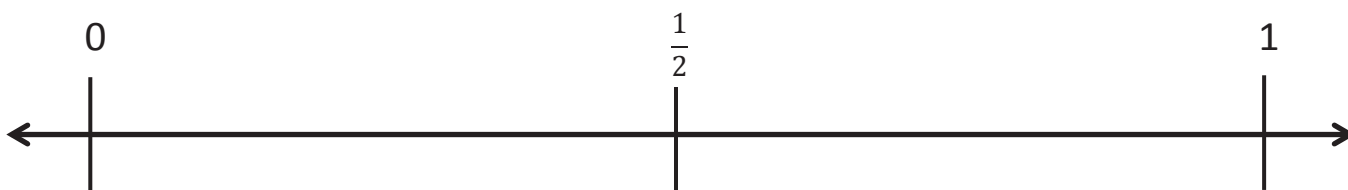
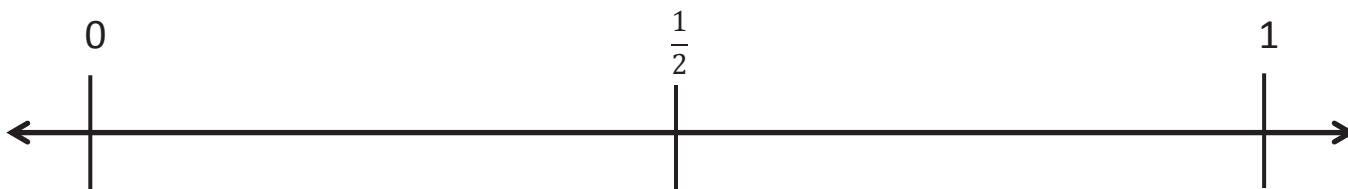
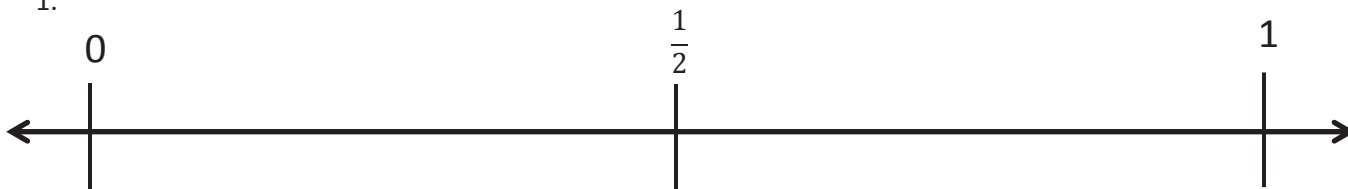
shapes

Name _____

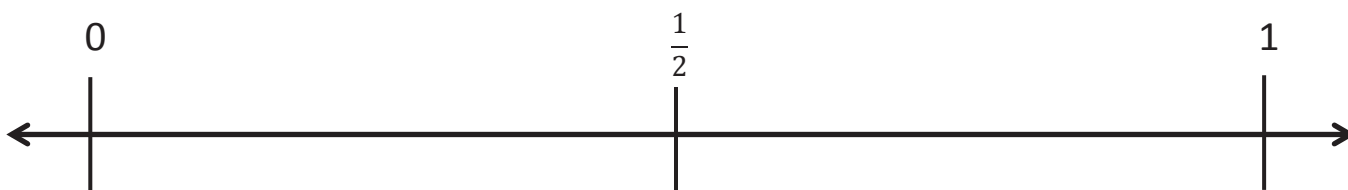
Date _____

Application Problem:

1.



2.



_____ number line

Name _____

Date _____



blank number lines with midpoint

Name _____

Date _____



blank number lines

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unlabeled hundred thousands place value chart

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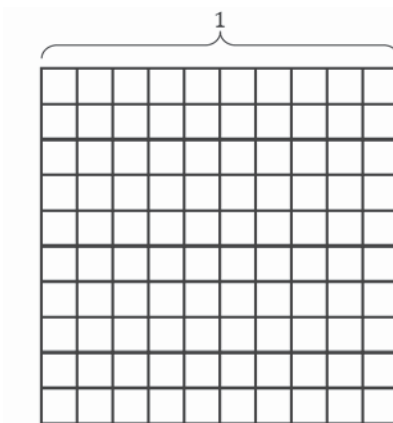
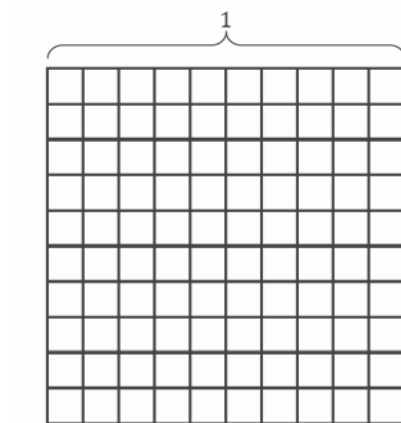
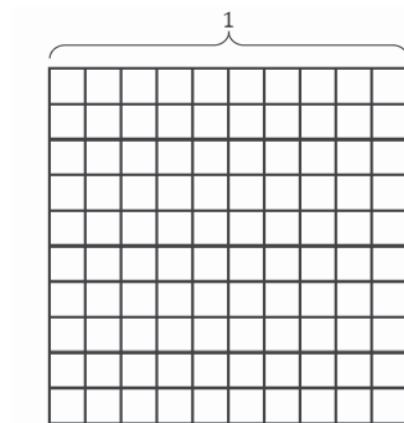
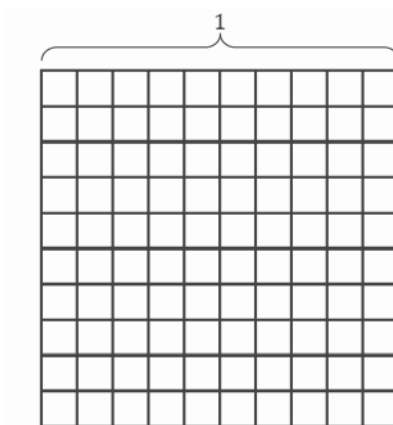
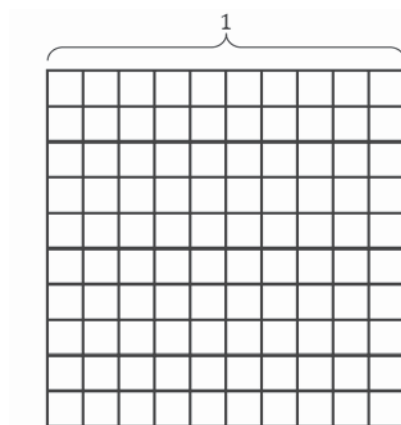
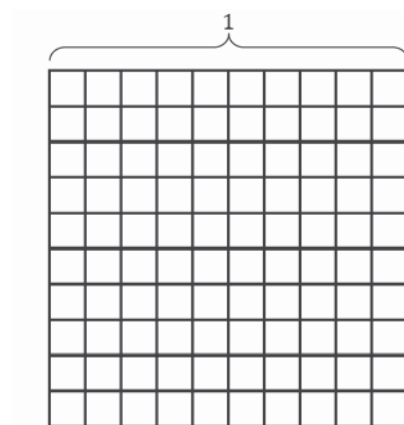
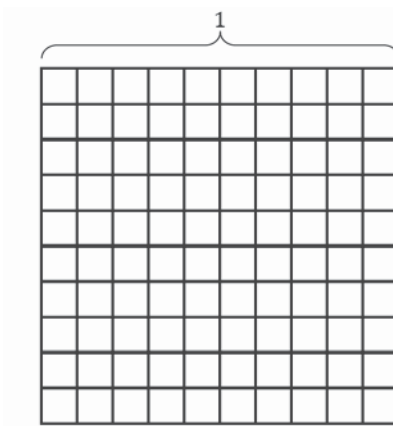
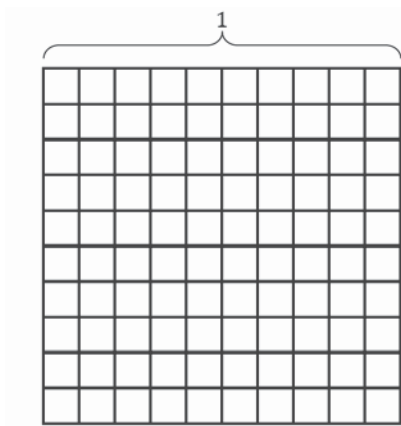
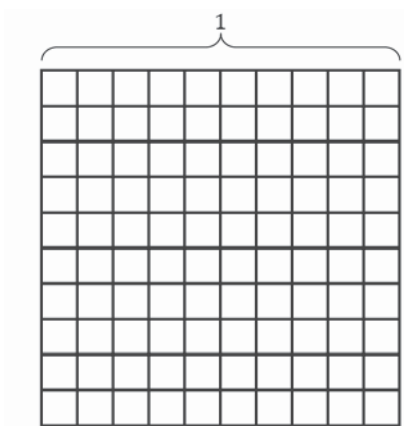
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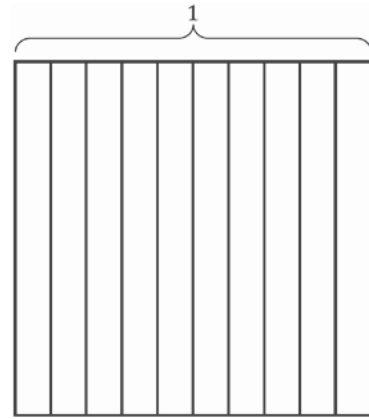
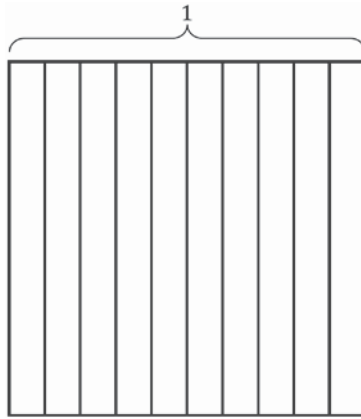
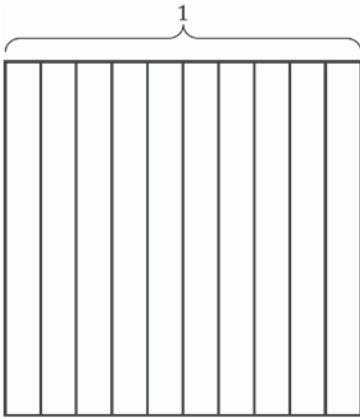
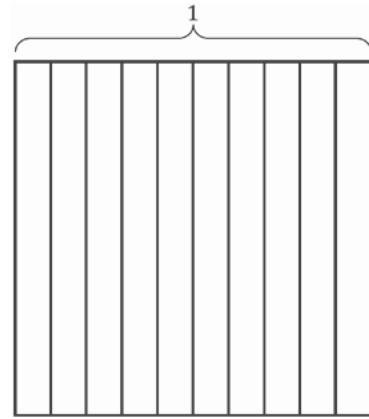
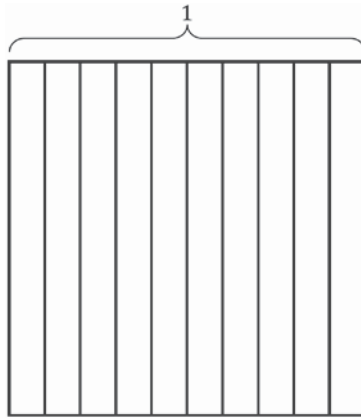
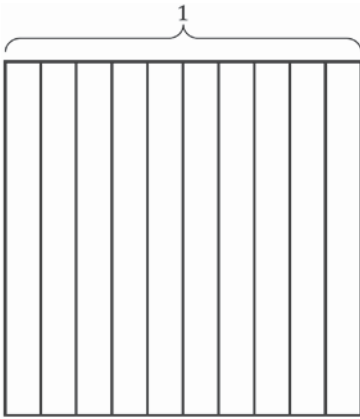
tenths area model



hundredths area model

| | |
|------------|--|
| hundredths | |
| tenths | |
| . | |
| ones | |
| tens | |
| hundreds | |

place value chart



| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
| | | | | |

area model and place value chart

3
tenths

0.2

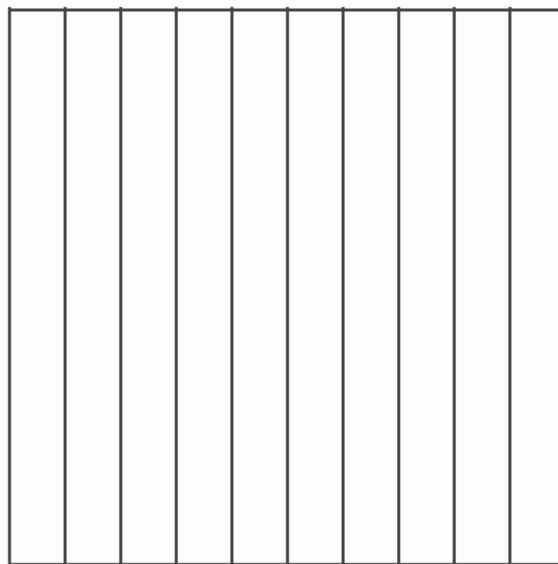
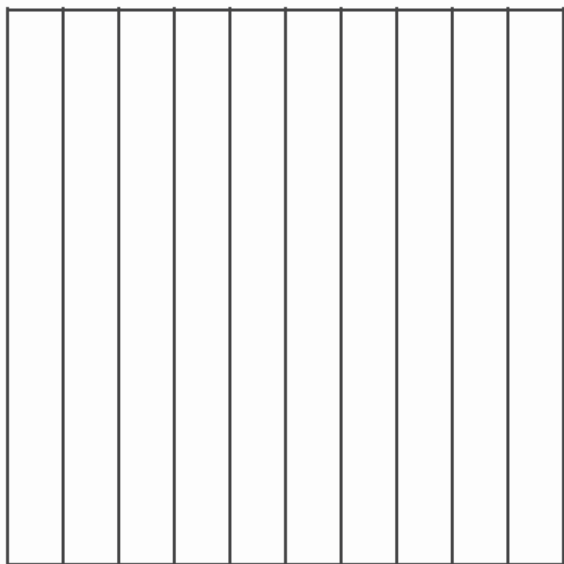
0.17

$\frac{34}{100}$

13
hundredths

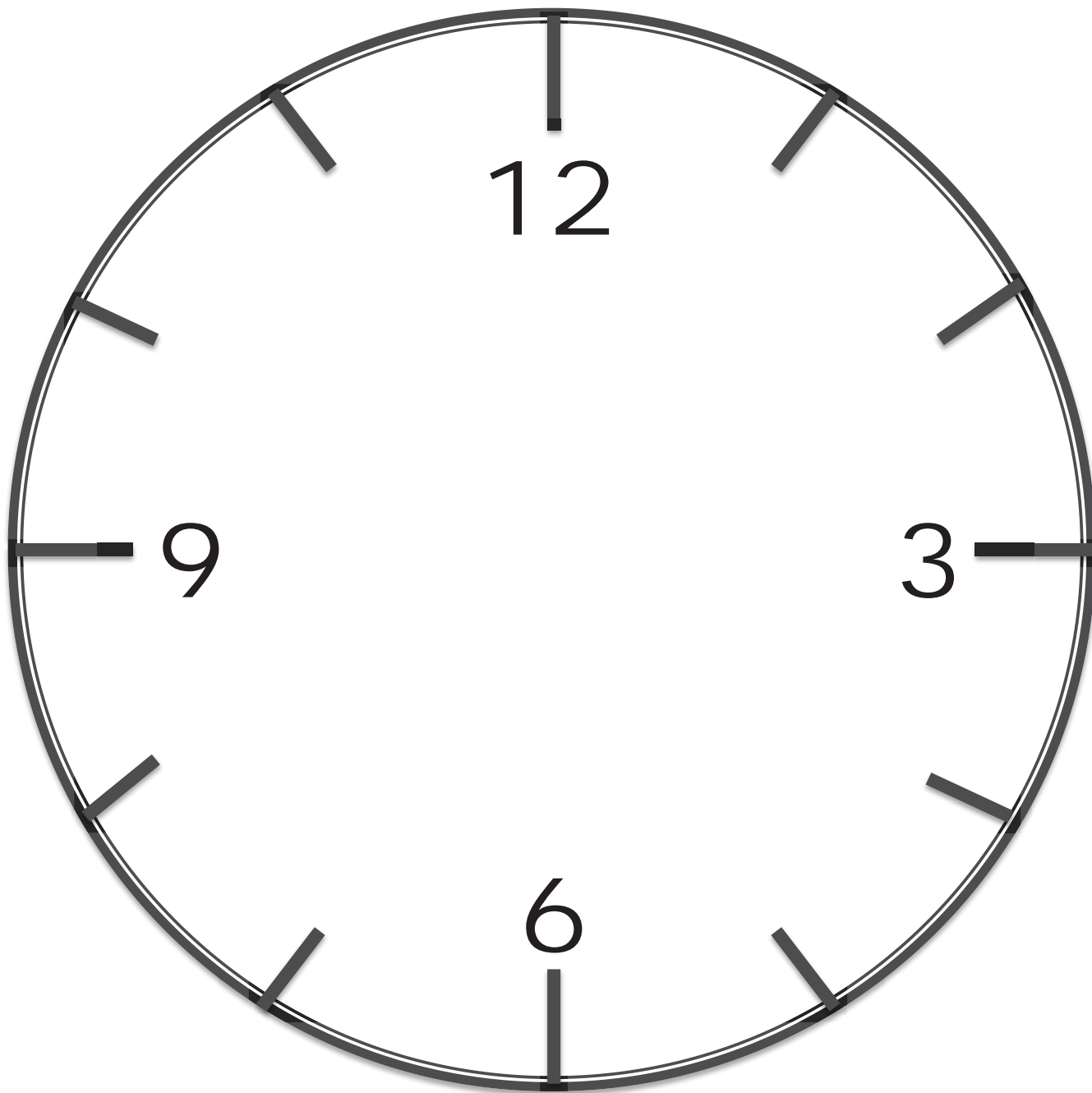
$\frac{4}{10}$

decimal number flash cards

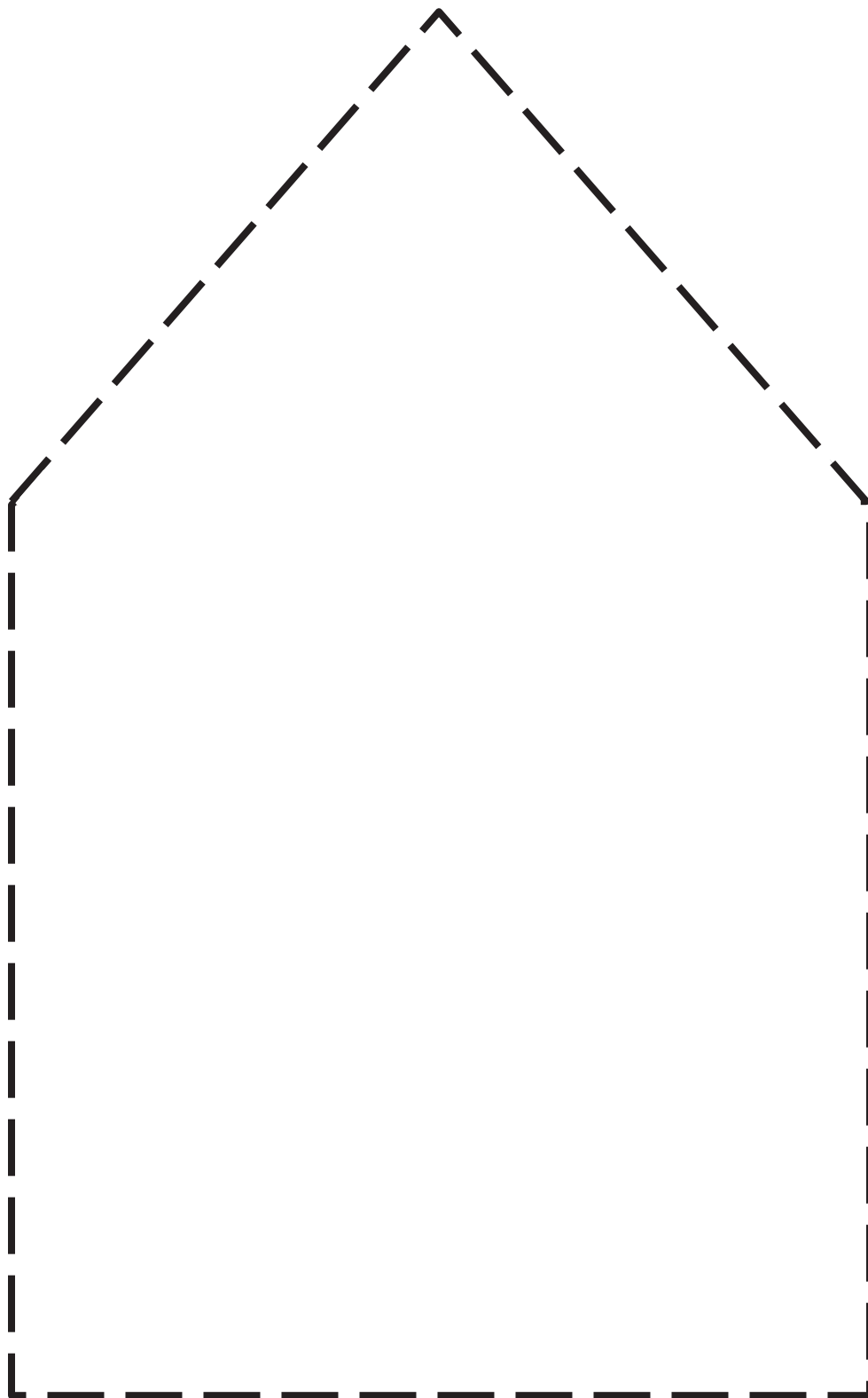


| ones | ● | tenths | hundredths |
|------|---|--------|------------|
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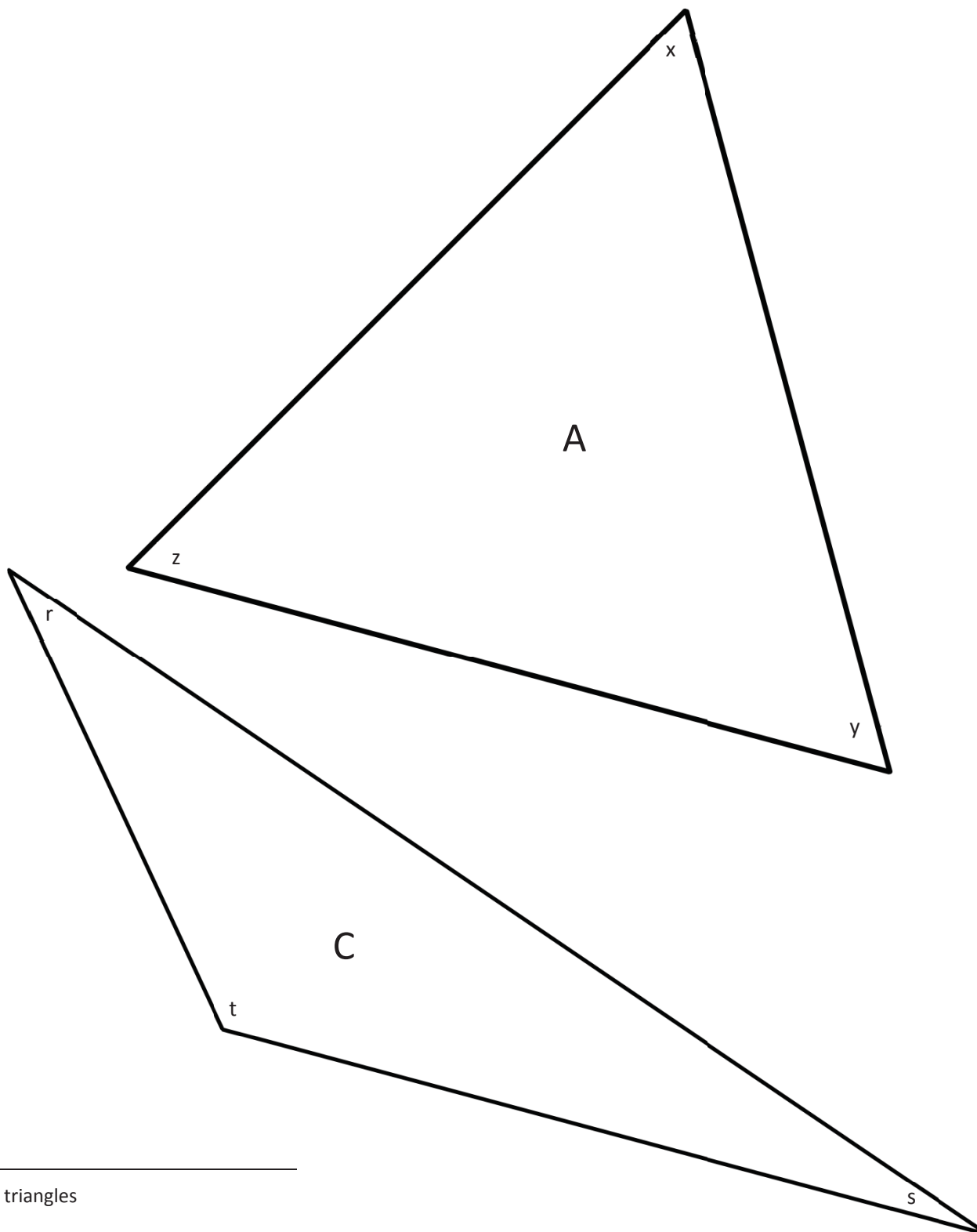
area model and place value chart



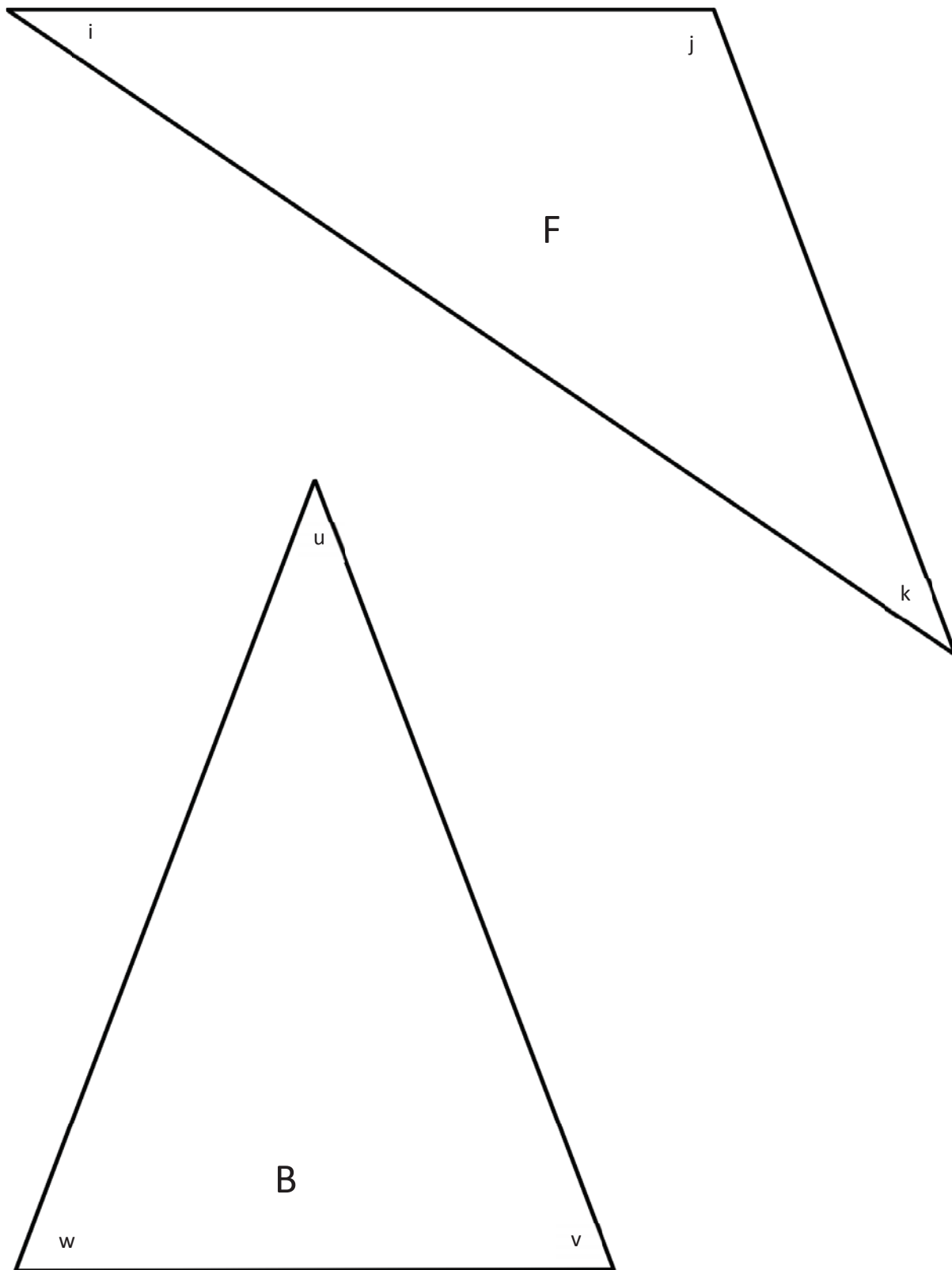
clock



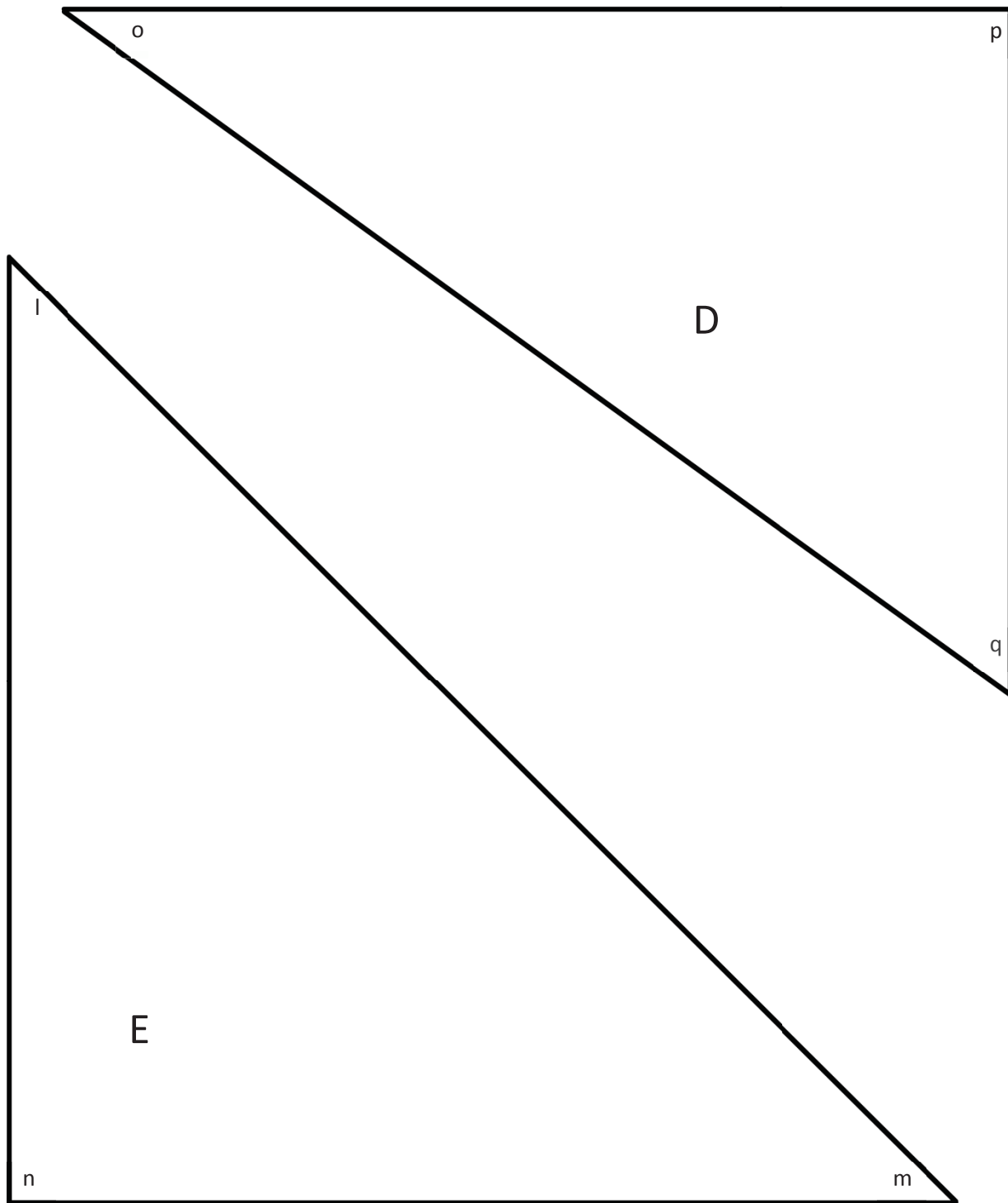
pentagon



triangles



triangles



triangles

Name _____

Date _____

Practice Set A Part 1: Multi-Digit Addition Fluency

1.

$$\begin{array}{r} 8, 149 \\ + 7, 264 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 42, 609 \\ + 8, 685 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 39, 563 \\ + 48, 438 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 658, 199 \\ + 25, 675 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 445, 976 \\ + 37, 415 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 438, 617 \\ + 493, 859 \\ \hline \end{array}$$

Practice Set A Part 2: Multi-Digit Addition Fluency

1.

$$\begin{array}{r} 9, 202 \\ + 6, 211 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 42, 774 \\ + 8, 520 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 53, 545 \\ + 34, 456 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 604, 754 \\ + 79, 120 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 454, 315 \\ + 29, 076 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 110, 728 \\ + 821, 748 \\ \hline \end{array}$$

Name _____

Date _____

Practice Set B Part 1: Multi-Digit Subtraction Fluency

1.

$$\begin{array}{r} 7,739 \\ - 5,546 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 23,145 \\ - 5,129 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 71,378 \\ - 61,876 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 479,541 \\ - 78,856 \\ \hline \end{array}$$

Practice Set B Part 2: Multi-Digit Subtraction Fluency

1.

$$\begin{array}{r} 7,699 \\ - 5,506 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 19,145 \\ - 1,129 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 71,878 \\ - 62,376 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 479,497 \\ - 78,812 \\ \hline \end{array}$$

Name _____

Date _____

Practice Set C Part 1: Multi-Digit Subtraction with Zeros Fluency

1.

$$\begin{array}{r} 7,890 \\ - 5,472 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 28,001 \\ - 5,853 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 60,407 \\ - 35,344 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 400,069 \\ - 24,362 \\ \hline \end{array}$$

Practice Set C Part 2: Multi-Digit Subtraction with Zeros Fluency

1.

$$\begin{array}{r} 7,890 \\ - 5,472 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 28,609 \\ - 6,461 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 60,497 \\ - 35,434 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 400,869 \\ - 25,162 \\ \hline \end{array}$$

Name _____

Date _____

Practice Set D Part 1: Multi-Digit Addition and Subtraction Fluency

1.
$$\begin{array}{r} 9,327 \\ + 9,664 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 39,463 \\ - 38,938 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 758,194 \\ + 35,478 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 839,014 \\ - 27,075 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 438,615 \\ + 193,979 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 960,043 \\ - 368,972 \\ \hline \end{array}$$

Practice Set D Part 2: Multi-Digit Addition and Subtraction Fluency

1.
$$\begin{array}{r} 9,630 \\ + 9,361 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 34,478 \\ - 33,953 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 754,454 \\ + 39,218 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 839,099 \\ - 27,160 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 108,215 \\ + 524,379 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 959,943 \\ - 368,872 \\ \hline \end{array}$$

| Classmate: | | Problem Number: | |
|---------------------------------------------------------------|--|-----------------|--|
| Strategies my classmate used: | | | |
| Things my classmate did well: | | | |
| Suggestions for improvement: | | | |
| Changes I would make to my work based on my classmate's work: | | | |

peer share and critique form

Name _____

Date _____

Convert Units: Teacher Card

Materials: (S) Mini-personal white board

T: (Write 1 m 20 cm = _____ cm.)
1 m 20 cm is how many centimeters?

S: 120 centimeters.

Repeat the process with this sequence:

$$1 \text{ m } 80 \text{ cm} = 180 \text{ cm}$$

$$3 \text{ km } 249 \text{ m} = 3,249 \text{ m}$$

$$4 \text{ L } 71 \text{ mL} = 4,071 \text{ mL}$$

$$2 \text{ kg } 5 \text{ g} = 2,005 \text{ g}$$

New Problem

T: (Write _____ = _____.)

_____ is how many _____?

S: _____.

Add Large Numbers: Teacher Card

Materials: (S) Mini-personal white board

T: (Write 747 thousands 585 ones.)
 On your board, write this number in
 standard form.

S: (Write 747,585.)

T: (Write 242 thousands 819 ones.)
 Add this number to 747,585 using the
 standard algorithm.

S: (Write 747,585 + 242,819 = 990,404
 using the standard algorithm.)

Continue the process with this sequence:

$$528,649 + 247,922 = 776,571$$

$$348,587 + 629,357 = 977,944$$

$$426,099 + 397,183 = 823,282$$

New Problem

T: (Write _____ thousands _____ ones.)

On your board, write this number in
 standard form.

S: (Write _____.)

T: (Write _____ thousands _____ ones.)

Add this number to _____
 using the standard algorithm.

S: (_____ + _____ = _____

using the standard algorithm.)

 fluency cards

Subtract Large Numbers: Teacher Card

Materials: (S) Mini-personal white board

T: (Write 600 thousands.) On your board, write this number in standard form.

S: (Write 600,000.)

T: (Write 545 thousands 543 ones.) Subtract this number from 600,000 using the standard algorithm.

S: (Write $600,000 - 545,543 = 54,457$ using the standard algorithm.)

Continue the process with this sequence:

$$400,000 - 251,559 = 148,441$$

$$700,000 - 385,476 = 314,524$$

$$600,024 - 197,088 = 402,936$$

New Problem

T: (Write _____ thousands.) On your board, write this number in standard form.

S: (Write _____.)

T: (Write _____ thousands _____ ones.) Subtract this number from _____ using the standard algorithm.

S: (_____ - _____ = _____ using the standard algorithm.)

Multiply Mentally: Teacher Card

Materials: (S) Mini-personal white board

T: (Write $32 \times 3 = \underline{\quad}$.)
Say the multiplication sentence.

S: $32 \times 3 = 96$.

T: (Write $32 \times 3 = 96$. Below it, write $32 \times 20 = \underline{\quad}$.)
Say the multiplication sentence.

S: $32 \times 20 = 640$.

T: (Write $32 \times 20 = 640$. Below it, write $32 \times 23 = \underline{\quad}$.)
On your board, solve 32×23 .

S: (Write $32 \times 23 = 736$.)

Repeat the process with this sequence:

$$42 \times 2 = 84, \quad 42 \times 20 = 840, \quad 42 \times 22 = 924$$

$$31 \times 4 = 124, \quad 31 \times 40 = 1,240, \quad 31 \times 44 = 1,364$$

New Problem

T: (Write _____ \times _____ = _____.)

Say the multiplication sentence.

S: _____ \times _____ = _____

T: (Write _____ \times _____ = _____. Below it, write _____ \times _____ = _____.)

Say the multiplication sentence.

S: _____ \times _____ = _____.

T: (Write _____ \times _____ = _____. Below it, write _____ \times _____ = _____.)

On your board, solve _____ \times _____.

S: (Write _____ \times _____ = _____.)

fluency cards

Divide Mentally: Teacher Card

Materials: (S) Mini-personal white board

T: (Write $40 \div 2$.) Write the division sentence in unit form.

S: 4 tens $\div 2 = 2$ tens.

T: (To the right, write $8 \div 2$.) Write the division sentence in unit form.

S: 8 ones $\div 2 = 4$ ones.

T: (Write $48 \div 2$.) Write the complete division sentence in unit form.

S: 4 tens 8 ones $\div 2 = 2$ tens 4 ones.

T: Say the division sentence.

S: $48 \div 2 = 24$.

Continue the process with this sequence:

$$90 \div 3 = 30, 3 \div 3 = 1, 93 \div 3 = 31$$

$$80 \div 4 = 20, 8 \div 4 = 2, 88 \div 4 = 22$$

$$180 \div 6 = 30, 6 \div 6 = 1, 186 \div 6 = 31$$

New Problem

T: (Write $\underline{\quad} \div \underline{\quad}$.) Write the division sentence in unit form.

S: $\underline{\quad}$ tens $\div \underline{\quad} = \underline{\quad}$ tens.

T: (To the right, write $\underline{\quad} \div \underline{\quad}$.) Write the division sentence in unit form.

S: $\underline{\quad}$ ones $\div \underline{\quad} = \underline{\quad}$ ones.

T: (Write $\underline{\quad} \div \underline{\quad}$.) Write the complete division sentence in unit form.

S: $\underline{\quad}$ tens $\underline{\quad}$ ones $\div \underline{\quad} = \underline{\quad}$ tens
 $\underline{\quad}$ ones.

T: Say the division sentence.

S: $\underline{\quad} \div \underline{\quad} = \underline{\quad}$.

fluency cards

State the Value of a Set of Coins: Teacher Card

Materials: (S) Mini-personal white board

T: (Draw 2 quarters and 4 dimes as number disks labeled 25¢ and 10¢.) What's the value of 2 quarters and 4 dimes?

S: 90¢.

T: Write 90 cents as a fraction of a dollar.

S: (Write $\frac{90}{100}$ dollar.)

T: Write 90 cents in decimal form using the dollar sign.

S: (Write \$0.90.)

Continue the process with this sequence:

1 quarter 9 dimes 12 pennies = 127¢, $\frac{127}{100}$ dollar, \$1.27

3 quarters 5 dimes 20 pennies = 145¢, $\frac{145}{100}$ dollar, \$1.45

New Problem

T: (Draw _____ quarters and _____ dimes as number disks labeled 25¢ and 10¢.) What's the value of _____?

S: _____.

T: Write _____ cents as a fraction of a dollar.

S: (Write _____ dollar.)

T: Write _____ cents in decimal form using the dollar sign.

S: (Write \$_____.)

Break Apart 180°: Teacher Card

Materials: (S) Mini-personal white board, protractor, straightedge

T: (Project a number bond with a whole of 180°. Fill in 80° for one of the parts.) On your board, complete the number bond, filling in the unknown part.

S: (Draw a number bond with a whole of 180°, and 80° and 100° as parts.)

T: Use your protractor to draw the pair of angles.

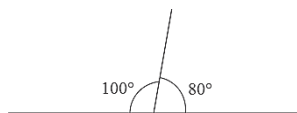
S: (Draw and label the two angles that make 180°.)

Continue the process for

$$120^\circ + 60^\circ = 180^\circ$$

$$35^\circ + 145^\circ = 180^\circ$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = 180^\circ$$

**New Problem**

T: (Project a number bond with a whole of 180°. Fill in _____° for one of the parts.)

On your board, complete the number bond, filling in the unknown part.

S: (Draw a number bond with a whole of 180°, and _____° and _____° as parts.)

T: Use your protractor to draw the pair of angles.

S: (Draw and label the two angles that make 180°.)

fluency cards

Bingo:

1. Players write a vocabulary term in each box of the math bingo game. Each term should be used only once. The box that says *Math Bingo* is a free space.
2. Players place the filled-in math bingo template in their mini-personal white boards.
3. One person is the caller and reads the definition on a vocabulary card.
4. Players cross off (or cover) the term that matches the definition.
5. *Bingo!* is called when 5 vocabulary terms in a row are crossed off diagonally, vertically, or horizontally. The free space counts as 1 box toward the needed 5 vocabulary terms.
6. The first player to have 5 in a row reads each crossed off word, states the definition, and gives a description or an example of each word. If all words are reasonably explained as determined by the caller, the player is declared the winner.

Math Jeopardy:

Structure: Teams or partnerships. Callers should prepare the game in advance.

1. The definitions are sorted into labeled columns by a caller: units, lines and angles, the four operations, and geometric shapes.
2. The first term directly below the heading has a value of \$100, the next \$200, and so on. The caller should make an effort to order the questions from easiest to hardest.
3. Player 1 chooses a column and a dollar value, for example, "I choose geometry terms for \$100." The caller reads, "The answer is...."
4. The players say the matching question, for example, "What is a quadrilateral?"
5. The first person to correctly state the question wins the dollar value for that card.
6. Play continues until all cards are used.
7. The player with the highest dollar value wins.

Concentration:

Structure: Teams or partnerships.

1. Create an array of all the cards face down.
2. Players take turns flipping over pairs of cards to find a match. A match is a vocabulary term and its definition. Cards keep their precise location in the array if not matched. Remaining cards are not reconfigured into a new array.
3. After all cards are matched, the player with the most pairs is the winner.

Math Pictionary:

Structure: Teams or partnerships.

1. A timer is set for 1 minute.
2. A vocabulary term is chosen from a bag by a player from Team 1, who draws an example as quickly as possible.
3. The player's teammate(s) tries to guess the vocabulary term. When the term is guessed, a new term is chosen by the same player. The process is repeated as many times as possible within the minute. Terms not guessed when the timer sounds go back in the bag.
4. A player from Team 2 repeats the process.
5. Teams count the number of words guessed. The team with the most words is the winner.

game descriptions

| | | | | |
|--|--|----------------|--|--|
| | | | | |
| | | | | |
| | | Math BINGO! | | |
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| | | Math BINGO! | | |
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math bingo

| | | | |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| A metric unit of measure equivalent to 1,000 grams. | A whole number greater than 1 whose only factors are 1 and itself. | An angle measuring less than 90 degrees. | Lines that intersect at 90-degree angles. |
| A whole number plus a fraction. | An angle that turns through $\frac{1}{360}$ of a circle. | The bottom number in a fraction that tells the number of equal parts in the whole. | A customary unit of measurement for liquid volume equivalent to 4 quarts. |
| A customary unit of measurement for liquid volume equivalent to 2 pints. | The answer to a multiplication problem. | The answer to a division problem. | A line through a figure such that when the figure is folded along an imaginary line, two halves are created that match up exactly. |
| Two lines in a plane that never intersect. | A triangle with at least two equal sides. | A whole number having three or more distinct factors. | A closed figure with 4 straight sides and 4 angles. |
| An angle measuring 90 degrees. | An angle with a measure greater than 90 degrees but less than 180 degrees. | Lines that contain at least 1 point in common. | A tool used to measure and draw angles. |
| The top number in a fraction that tells how many parts of the whole are selected. | A triangle that contains one 90-degree angle. | This special angle measures 180 degrees. | A closed figure with 3 straight sides of equal length and 3 equal angles. |

vocabulary cards (page 1)

| | | | |
|----------------|--------------------|------------------------|----------------------|
| Kilogram | Prime Number | Acute Angle | Perpendicular Lines |
| Mixed Number | One-Degree Angle | Denominator | Gallon |
| Quart | Product | Quotient and Remainder | Line of Symmetry |
| Parallel Lines | Isosceles Triangle | Composite Number | Quadrilateral |
| Right Angle | Obtuse Angle | Intersecting Lines | Protractor |
| Numerator | Right Triangle | Straight Angle | Equilateral Triangle |

vocabulary cards (page 2)