Module 4 - Lesson 30:

Create and solve real-world problems for given numerical expressions involving decimals.

CCSS Standard – 5.OA.A.1 / 5.OA.A.2

FLUENCY (10-min) **Whiteboard Exchange: Draw Geometric Figures**

On my signal, read the name of the figure and then draw an example of the figure on your whiteboard. Ready?

line segment AB	line CD	$\overline{DY}$

FLUENCY (10-min) **Whiteboard Exchange: Draw Geometric Figures**

On my signal, read the name of the figure and then draw an example of the figure on your whiteboard. Ready?

$\overleftrightarrow{BN}$	parallel lines EF and GH	perpendicular lines JK and LM

FLUENCY (10-min) **Whiteboard Exchange: Draw Geometric Figures**

On my signal, read the name of the figure and then draw an example of the figure on your whiteboard. Ready?

$\overline{QX} \perp \overline{NS}$

$\overline{RS} \parallel \overline{TU}$

FLUENCY (10-min) **Whiteboard Exchange: Unknown Angle Measures**

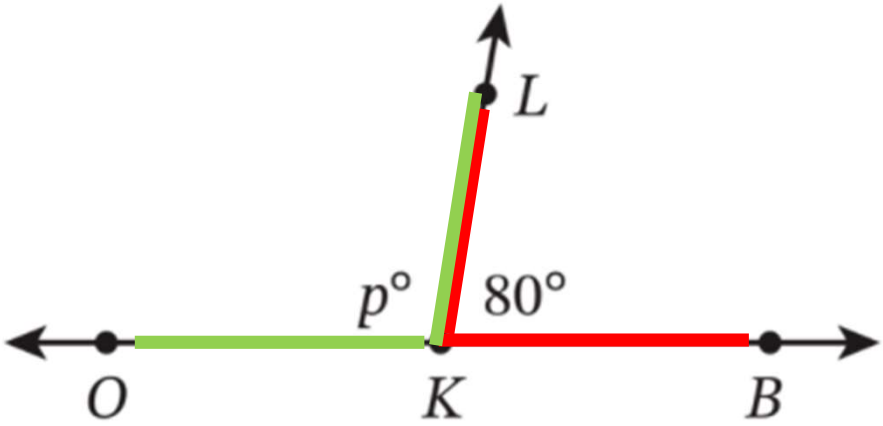
Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

∠OKB is a **straight angle**.
How many **degrees** are in a straight angle?

180°

How many degrees are in ∠LKB? **80°**

What type of angle is ∠LKB? **acute**



Write a subtraction equation to find the measures of **∠LKO**. Write the measure of ∠LKO.

What type of angle is ∠LKO? **obtuse**

FLUENCY (10-min) **Whiteboard Exchange: Unknown Angle Measures**

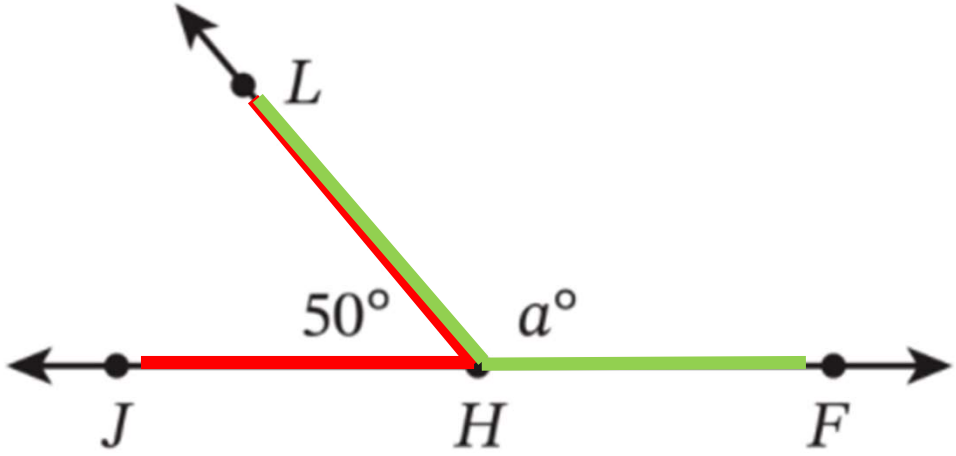
Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

∠JHF is a **straight angle**.
How many **degrees** are in a straight angle?

180°

How many degrees are in ∠LHJ? **50°**

What type of angle is ∠LHJ? **acute**



Write a subtraction equation to find the measures of **∠LHF**. Write the measure of ∠LHF.

What type of angle is ∠LHF? **obtuse**

FLUENCY (10-min) **Whiteboard Exchange: Unknown Angle Measures**

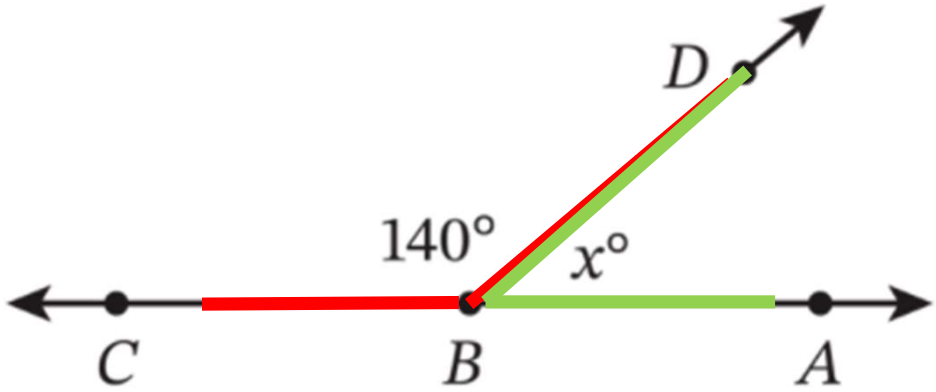
Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

∠CBA is a **straight angle**.
How many **degrees** are in a straight angle?

180°

How many degrees are in ∠CBD? **140°**

What type of angle is ∠CBD? **obtuse**



Write a subtraction equation to find the measures of **∠DBA**. Write the measure of ∠DBA.

What type of angle is ∠DBA? **acute**

FLUENCY (10-min) **Whiteboard Exchange: Unknown Angle Measures**

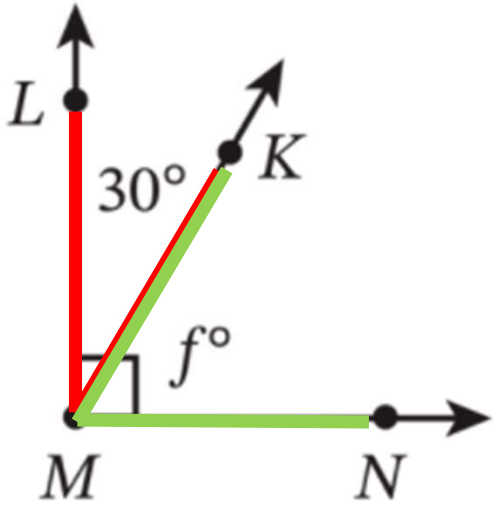
Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

∠LMN is a **right angle**.
How many **degrees** are in a right angle?

90°

How many degrees are in ∠LMK? **30°**

What type of angle is ∠LMK? **acute**



Write a subtraction equation to find the measures of **∠KMN**. Write the measure of ∠KMN.

What type of angle is ∠KMN? **acute**

LAUNCH (5-min) **Match an expression to a word problem context.**

Read each problem to yourself.
You do not need to do any calculations.

Problem A	Problem B
Blake ran 3.56 kilometers on Saturday. He ran 5.05 kilometers on Sunday. Sasha ran twice as far as Blake over the weekend. How far did Sasha run?	Mr. Evans buys 2 greeting cards and 1 roll of wrapping paper. Each card costs $3.56. The roll of wrapping paper costs $5.05. How much does Mr. Evans spend?

( )

Now, look at the expression.
THINK-PAIR-SHARE: Which problem does the expression represent? Why?

What change can we make to the expression so that it represents problem A? Why?

LEARN (35-min) **Brainstorm Word Problem Situations**

THINK-PAIR-SHARE:

Let's list some real-world scenarios that might involve decimals.

- Buying items at a store.
- Making a recipe
- Measuring things
- Running a race
- Riding a bike
- Filling containers

…so many options

Now, what operations could we use in our real-world scenarios?

- Adding up the miles I ride on my bike.
- Subtracting how far I ran Saturday compared to Sunday.
- Multiplying – riding twice as far on my bike compared to my friend.
- Dividing the total miles, I rode on my bike by the number of days.

LEARN (35-min)

Write and Solve Word Problems to Represent Expressions and Tape Diagrams

Using the expression below, construct a context that could apply to it.
Be ready share out.

$$1.3 + (4 \times 0.75)$$

A notebook costs $1.30, and an eraser costs $0.75. How much does it cost to buy 1 notebook and 4 erasers.

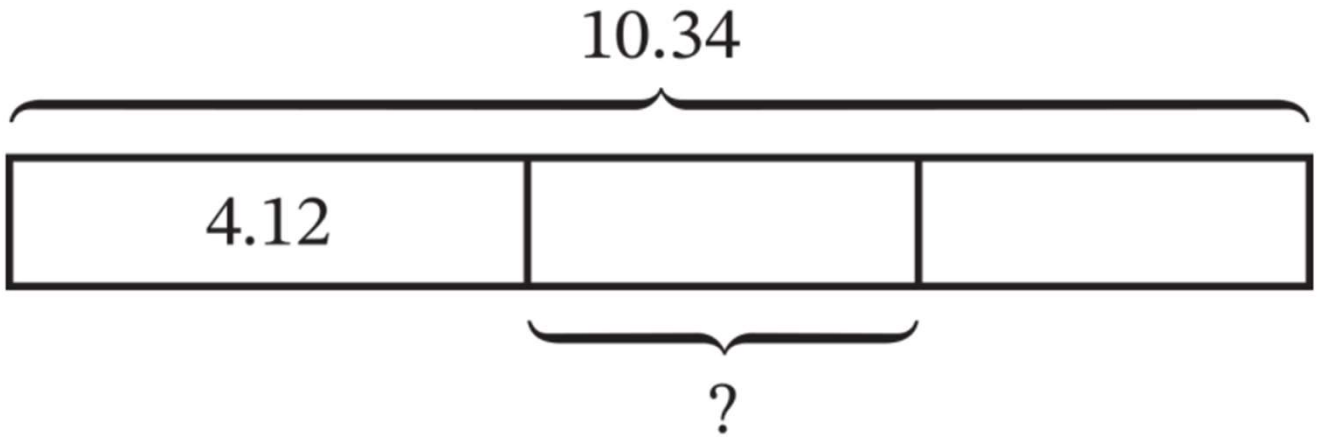
Eddie buys 1 bag of red apples that weighs 1.3 kilograms. He buys 4 bags of green apples that each weigh 0.75 kilograms. How many kilograms of apples does Eddie buy?

LEARN (35-min)

Write and Solve Word Problems to Represent Expressions and Tape Diagrams

2 MIN

Using the tape diagram below, construct a context that could apply to it. Be ready share out.



Noah has $10.34. He buys a toy that costs $4.12. He spends the rest of his money when he buy 2 sandwiches. Each sandwich costs the same amount. How much does each sandwich cost?

Yuna has 10.34 meters of rope. She uses 4.12 meters to make a climbing rope. She cuts the rest of the rope into 2 equal parts. How many meters of rope are in each part?

LEARN (35-min)

Write and Solve Word Problems to Represent Expressions and Tape Diagrams

LEARN book page 275.

Write a word problem that can be represented by the expression or tape diagram. Then solve the word problem.

1. $(1.15 + 0.9) \div 5$

Riley combined 1.15 kilograms of almonds and 0.9 kilograms of cashews in a large bowl. She then divided the mix evenly into 5 containers. How many kilograms of the mix are in each container?

$$(1.15 + 0.9) \div 5$$

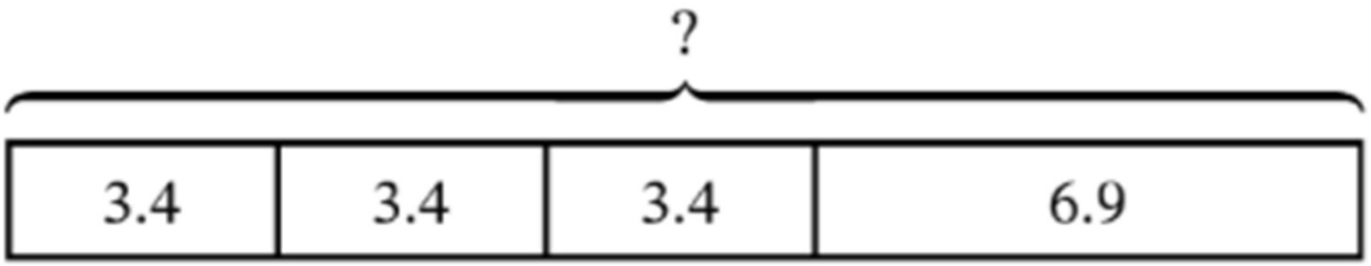
$$2.05 \div 5$$

$$0.41 \text{ kg}$$

LEARN (35-min)

Write and Solve Word Problems to Represent Expressions and Tape Diagrams

LEARN book page 275.



Leo walks 3.4 kilometers each day for 3 days. He walks 6.9 kilometers on the fourth day. What is the total number of kilometers Leo walks in 4 days?

$(3.4 \times 3) + 6.9$

$10.2 + 6.9$

17.1 km

LEARN (35-min)

Write and Solve Word Problems to Represent Expressions and Tape Diagrams

LEARN book page 275.

(7 x 1.25) – (3 x 2.45)

At a bake sale, Tyler buys 7 cookies and Julie buys 3 muffins. Each cookie costs $1.25 and each muffin costs $2.45. How much more does Tyler spend at the bake sale than Julie?

(7 x $1.25) – (3 x $2.45)

$8.75 - $7.35

$1.40

LAND (10-min) **Exit Ticket**

Name _____ Date _____

30

Write a word problem that can be represented by the expression. Then solve the word problem.

$5 - (1.15 + 3.61)$

Exit Ticket – PAGE 281

Small Group Time:
Problem Set Page 277 - 279

Homework:
Page 189 APPLY BOOK