WALT estimate and compare angles.

WILF:

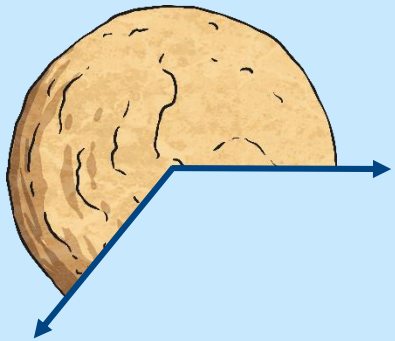
- Know angles are measured in degrees
- Estimate and compare acute, obtuse and reflex angles.

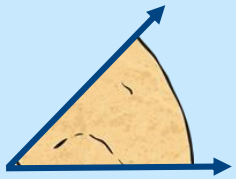
Twinkl Slides – E = edited.

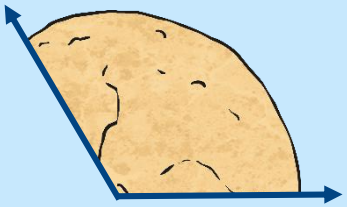
Here are three types of angle: reflex, acute and obtuse – can you remember which is which?

- What type of angle is shown in each biscuit picture?
- Estimate the size of each angle.

Remember to use what you already know about angle properties.

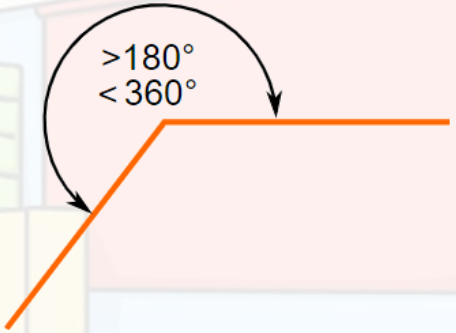






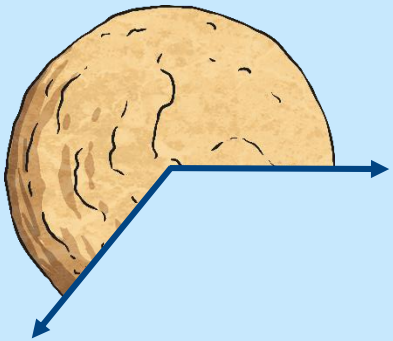
Measuring Angles in Degrees

A **Reflex Angle** is more than 180° but less than 360°

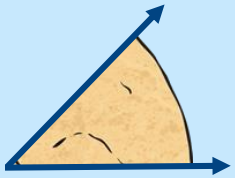


Watch this fun video to help you remember angle sizes:

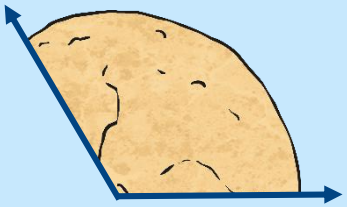
https://safeYouTube.net/w/coJE



reflex
230°



acute
45°



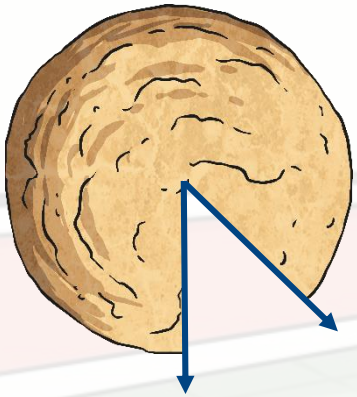
obtuse
120 °

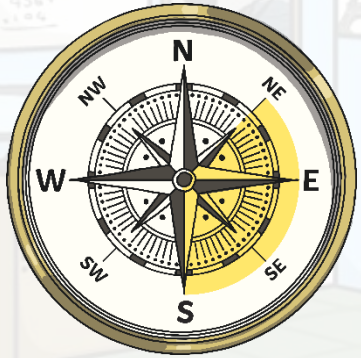
Confused? Look here: https://www.mathsisfun.com/angles.html

Measuring Angles in Degrees

Diving

Estimate the angles and then order from smallest to greatest.

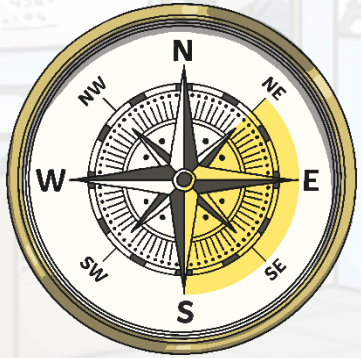


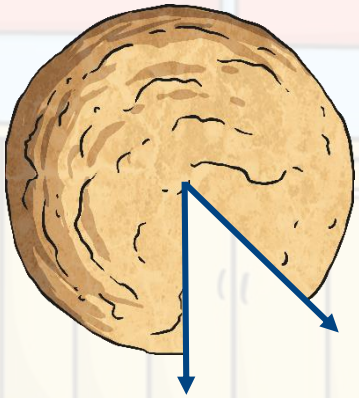


Measuring Angles in Degrees

Diving

Estimate the angles and then order from smallest to greatest.

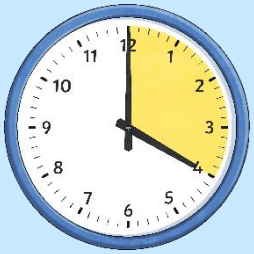


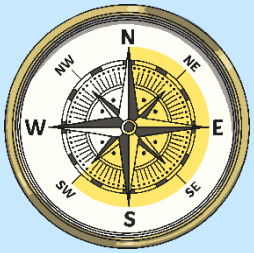


acute 60°	obtuse 135°	reflex 270°	reflex 310°

Measuring Angles in Degrees

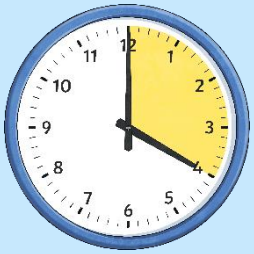
Use the greater than, less than and equals symbols (> < =) to complete these statements. Think about the 'slices of pizza' to help with the fractions.

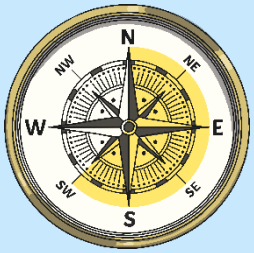
a quarter turn ☐ 

$\frac{5}{8}$ of a turn ☐ 

$\frac{3}{4}$ of a turn ☐  ☐ a right angle

Measuring Angles in Degrees

a quarter turn $<$ 

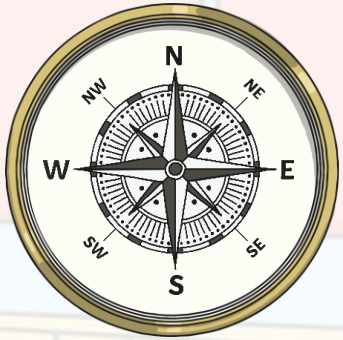
$\frac{5}{8}$ of a turn $=$ 

$\frac{3}{4}$ of a turn $>$  $<$ a right angle

Measuring Angles in Degrees

Pssst: clockwise is the direction a clock hand moves in.

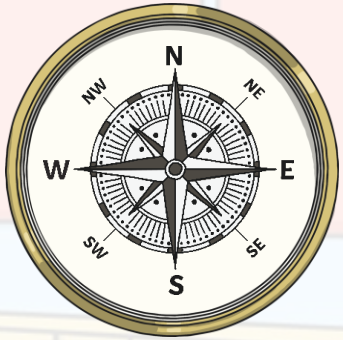
If I turn in a clockwise direction from north to north-west, my turn is an acute angle.



Is Sam correct? Explain your answer.

Measuring Angles in Degrees

If I turn in a clockwise direction from north to north-west, my turn is an acute angle.



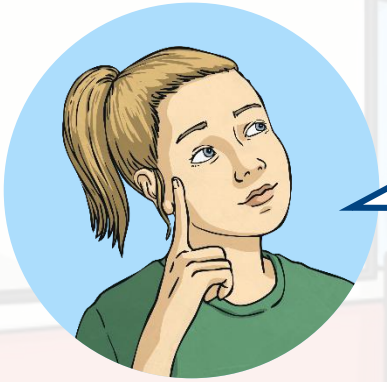
Is Sam correct? Explain your answer.

Sam is incorrect. If you turn clockwise from north to north-west, this is nearly a full turn. It is 315°.

If Sam had turned anticlockwise, this would have been an acute angle of 45°.

Measuring Angles in Degrees

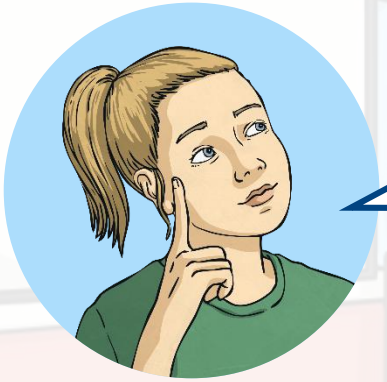
True or False?



$\frac{3}{8}$ of a whole turn is less than a right angle.

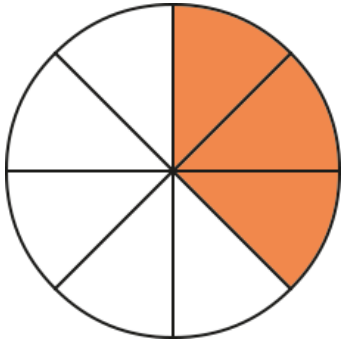
Measuring Angles in Degrees

True or False?



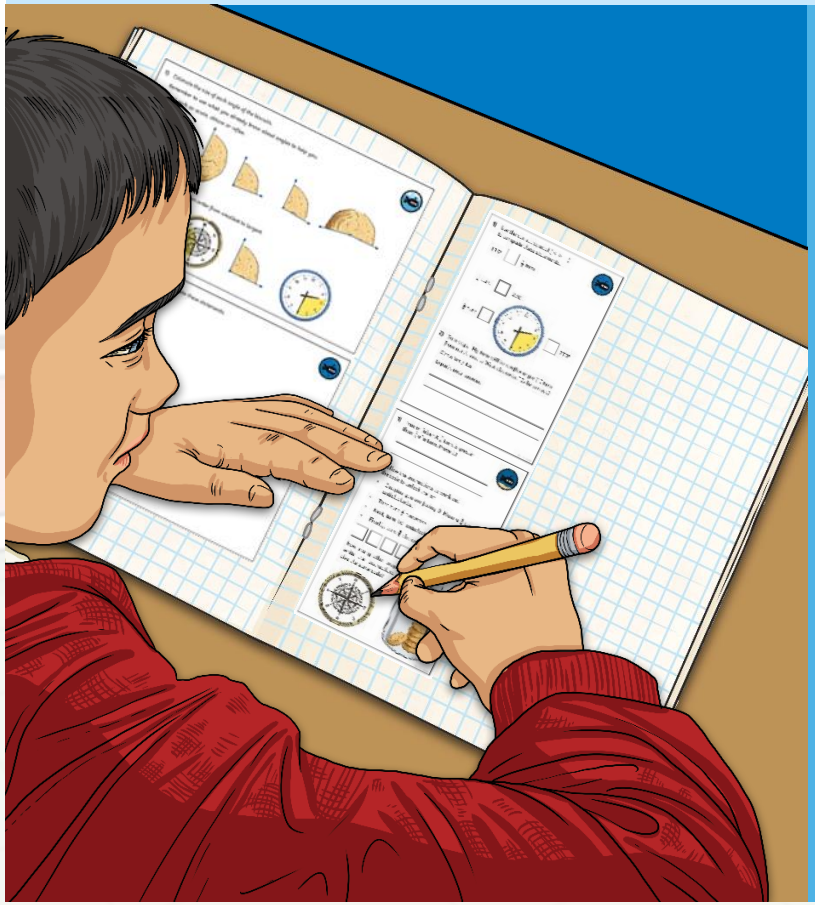
$\frac{3}{8}$ of a whole turn is less than a right angle.

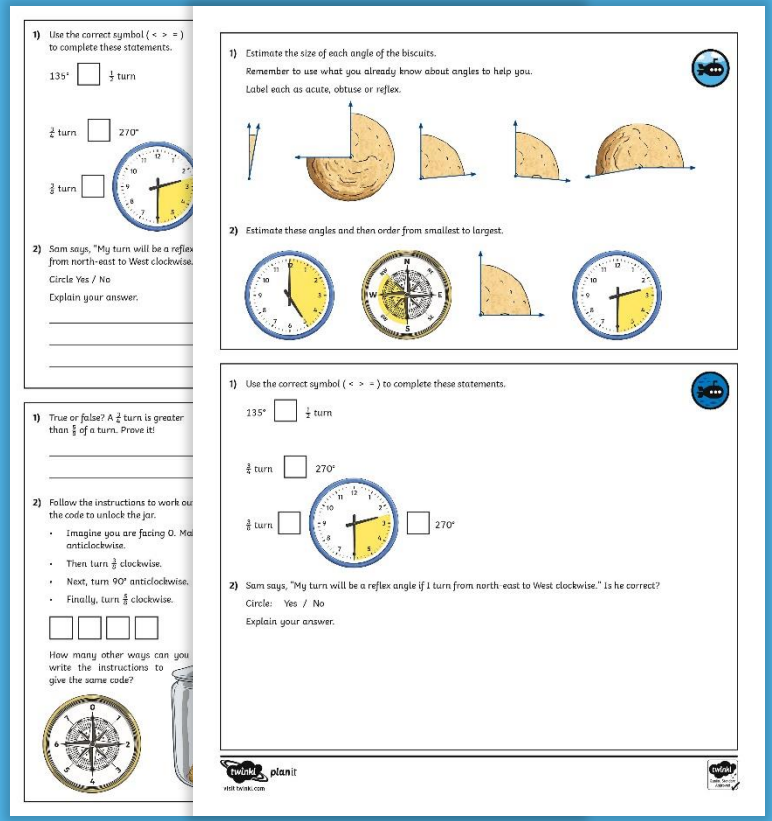
False. $\frac{3}{8}$ of a whole turn is 135° and a right angle is 90°.



Calculating Angles on a Straight Line

Now please complete the activity – ‘Week 5. Maths. Thursday Activity.’





1) Use the correct symbol (< > =) to complete these statements.

135° ☐ $\frac{1}{2}$ turn

$\frac{3}{4}$ turn ☐ 270°

$\frac{3}{8}$ turn ☐

2) Sam says, "My turn will be a reflex from north-east to West clockwise."

Circle Yes / No

Explain your answer.

1) True or false? A $\frac{3}{4}$ turn is greater than $\frac{5}{8}$ of a turn. Prove it!

2) Follow the instructions to work out the code to unlock the jar.

- Imagine you are facing O. Ma anticlockwise.
- Then turn $\frac{3}{8}$ clockwise.
- Next, turn 90° anticlockwise.
- Finally, turn $\frac{5}{8}$ clockwise.

☐☐☐☐

How many other ways can you write the instructions to give the same code?

1) Estimate the size of each angle of the biscuits.

Remember to use what you already know about angles to help you.

Label each as acute, obtuse or reflex.

2) Estimate these angles and then order from smallest to largest.

1) Use the correct symbol (< > =) to complete these statements.

135° ☐ $\frac{1}{2}$ turn

$\frac{3}{4}$ turn ☐ 270°

$\frac{3}{8}$ turn ☐ 270°

2) Sam says, "My turn will be a reflex angle if 1 turn from north-east to West clockwise." Is he correct?

Circle: Yes / No

Explain your answer.

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