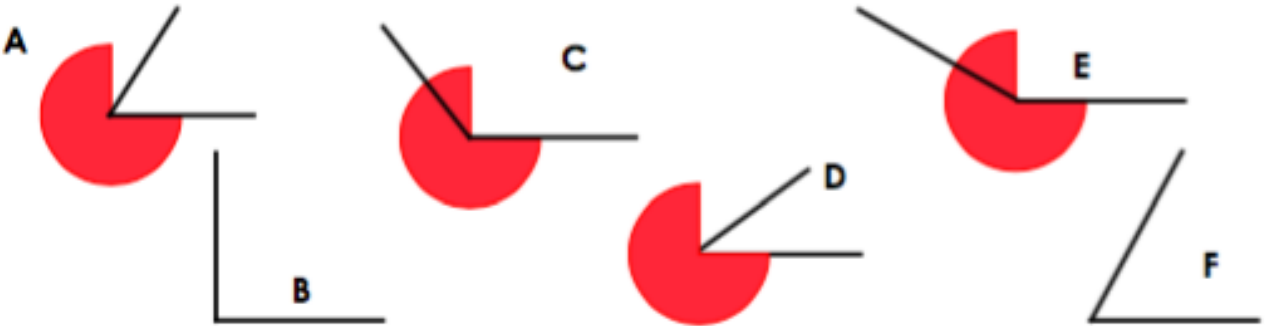


## Green

### Identifying and comparing angles

Can you name the type of angle? Is it acute, obtuse or a right angle?

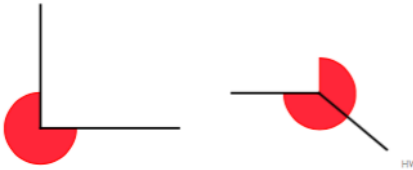


Fatma says:

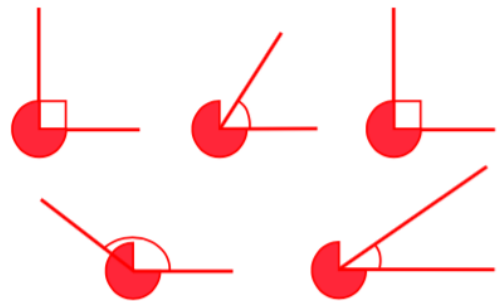


I know the right angle size is bigger than the obtuse angle because the lines are longer.

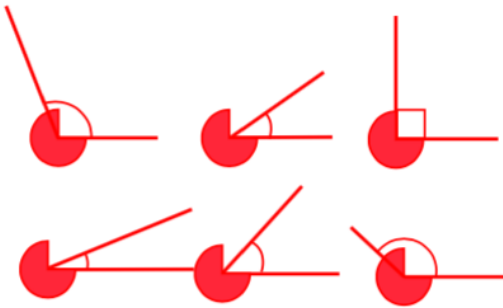
Do you agree?



Which angles are right angles?



Which angles are acute angles?



Use the symbols  $<$  or  $>$  to make the statements correct.

right  
angle



acute  
angle

Match the angles which will still be acute when they are combined.

60°

40°

30°

25°

75°

10°

Match the angles which will still be acute when they are combined.

20°

65°

40°

15°

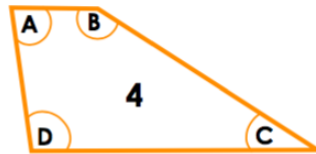
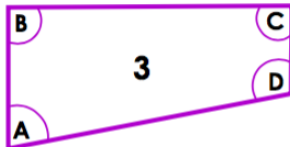
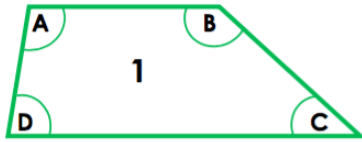
50°

40°

## Yellow

### Identifying and comparing angles

True or false? Angle B is the largest angle in each of the shapes below.



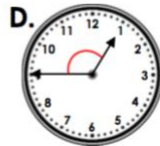
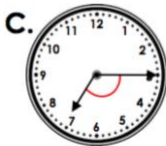
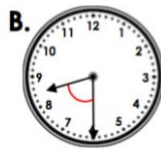
Match the angle size to the correct label.



right angle

obtuse angle

Compare the angles made by the clock hands below and spot the odd one out.



Match the angle size to the correct label.



obtuse angle

acute angle

Using the digits below can you create more acute or obtuse angles?



Using the digits below can you create more acute or obtuse angles?



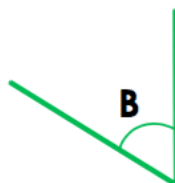
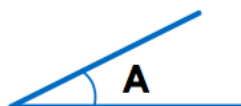
Jemma has been ordering the angles below.

She says:



Using an angle tester, I have ordered the angles below from smallest to largest.

Is she correct? Prove it.



# Red

## Identifying and comparing angles

Use the symbols  $<$ ,  $>$  or  $=$  to make the statements correct.

right angle ☐  $90^\circ$  ☐ acute angle

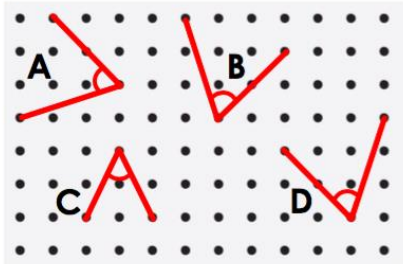
$45^\circ$  ☐ right angle ☐  $180^\circ$

Use the symbols  $<$ ,  $>$  or  $=$  to make the statements correct.

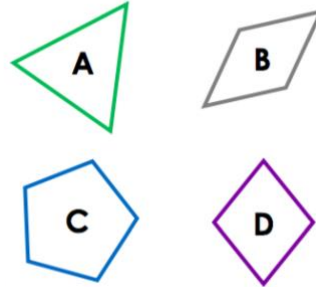
$75^\circ$  ☐ right angle ☐  $121^\circ$

obtuse angle ☐ acute angle ☐  $87^\circ$

True or false? Angle A is the same size as angles B and D, which are bigger than angle C.



Which of these shapes contains the largest angle?



Zane is discussing angles.



Zane

I have 4 angles. One angle is  $135^\circ$ , one is obtuse, one is a right angle and the other is  $73^\circ$ . I think that the  $135^\circ$  angle is the largest angle.

Is Zane correct? Explain your answer.

Hal is discussing angles.

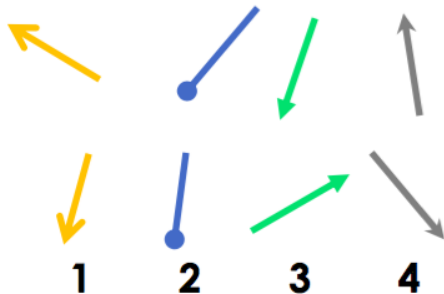


Hal

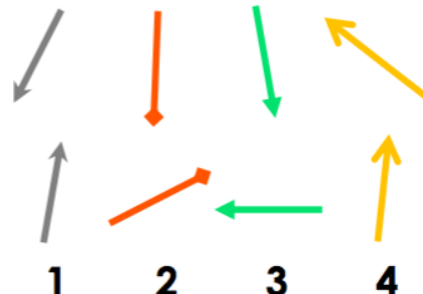
I have 4 angles. One is obtuse, one is  $90^\circ$ , one is acute and one is  $25^\circ$ . The  $90^\circ$  angle must be the 2<sup>nd</sup> largest angle.

Is Hal correct? Explain your answer.

If you join together the end points of the matching lines below, do they make 4 angles in order from smallest to largest? Be sure to compare the smallest side of each angle created.



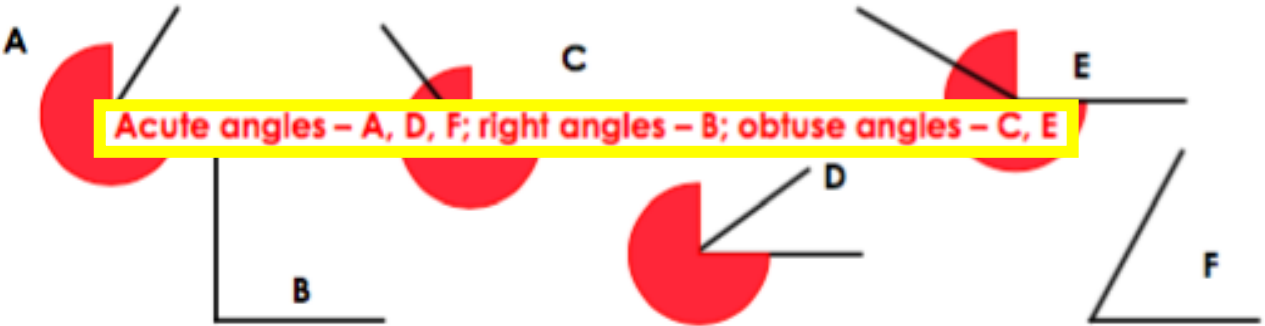
If you join together the end points of the matching lines below, do they make 4 angles in order from largest to smallest? Be sure to compare the smallest side of each angle created.



## Green Answers

### Identifying and comparing angles

Can you name the type of angle? Is it acute, obtuse or a right angle?



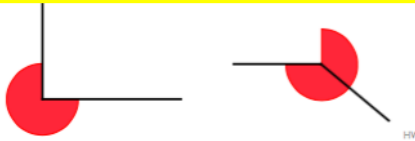
**Acute angles – A, D, F; right angles – B; obtuse angles – C, E**

Fatma says:

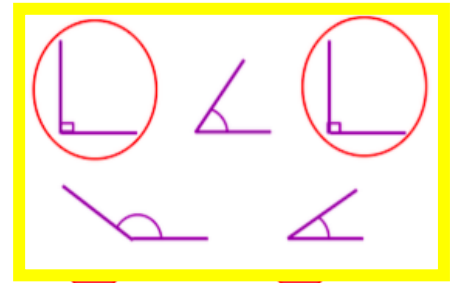
I know the right angle size is bigger than the obtuse angle because the lines are longer.

**Fatma is incorrect. The obtuse angle size is bigger. The length of the lines are irrelevant.**

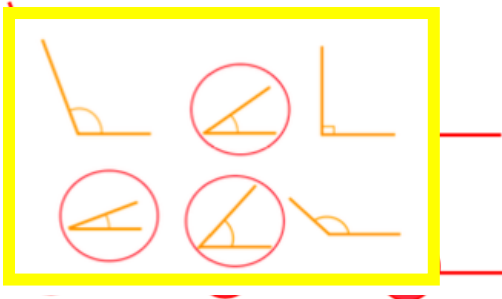
Do you agree?



Which angles are right angles?



Which angles are acute angles?



Use the symbols  $<$  or  $>$  to make the statements correct.

right angle



acute angle

Match the angles which will still be acute when they are combined.

60°

40°

**60° – 25°; 30° – 40°; 75° – 10°.**

75°

10°

Match the angles which will still be acute when they are combined.

20°

65°

**20° – 65°; 40° – 40°; 50° – 15°.**

40°

15°

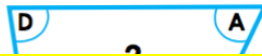
50°

40°

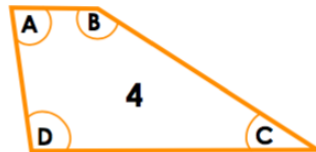
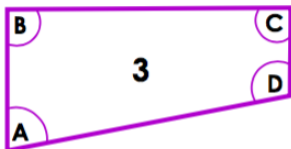
## Yellow Answers

### Identifying and comparing angles

True or false? Angle B is the largest angle in each of the shapes below.



**1. true, 2. true, 3. false (the answer is D), 4. true**



Match the angle size to the correct label.

right angle

**Obtuse**

acute angle

Compare the angles made by the clock hands below and spot the odd one out.



**B is the odd one out.**



Match the angle size to the correct label.

obtuse

**Obtuse**

acute angle

Using the digits below can you create more acute or obtuse angles?

**I can only create acute angles; 37°, 35°, 34°, 73°, 75°, 74°, 53°, 57°, 54°, 43°, 47°, 45°.**

Using the digits below can you create more acute or obtuse angles?

**I can create more acute angles; acute = 81°, 89°, 86°, 18°, 19°, 16°, 68°, 61°, 69°; obtuse = 91°, 96°, 98°, 168°, 169°.**

Jemma has been ordering the angles below.

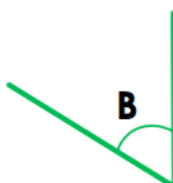
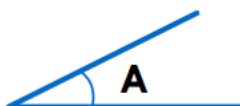
She says:



Using an angle tester, I have

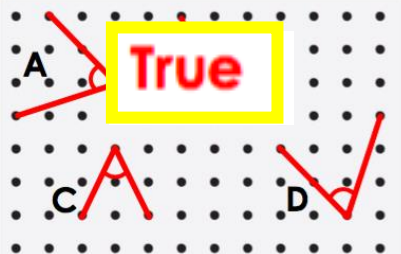
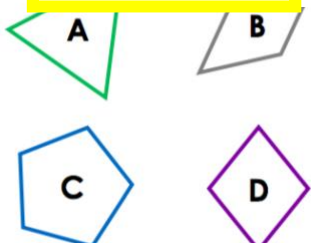
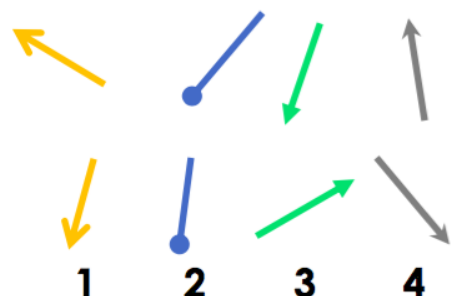
**Jemma is incorrect because angle D is smaller than angle C.**

Is she correct? Prove it.



## Red Answers

### Identifying and comparing angles

<p>Use the symbols <math>&lt;</math>, <math>&gt;</math> or <math>=</math> to make the statements correct.</p> <p>right angle <span style="border: 1px solid black; padding: 2px;"><math>=, &gt;</math></span> acute angle</p> <p><math>45^\circ</math> <span style="border: 1px solid black; padding: 2px;"><math>&lt;, &lt;</math></span> angle <span style="border: 1px solid black; padding: 2px;"><math>&lt;, &lt;</math></span> <math>180^\circ</math></p>	<p>Use the symbols <math>&lt;</math>, <math>&gt;</math> or <math>=</math> to make the statements correct.</p> <p><math>75^\circ</math> <span style="border: 1px solid black; padding: 2px;"><math>&lt;, &lt;</math></span> right <span style="border: 1px solid black; padding: 2px;"><math>&lt;, &lt;</math></span> <math>121^\circ</math></p> <p>obtuse angle <span style="border: 1px solid black; padding: 2px;"><math>&gt;, =</math></span> angle <span style="border: 1px solid black; padding: 2px;"><math>&gt;, =</math></span> <math>87^\circ</math></p>
<p>True or false? Angle A is the same size as angles B and D, which are bigger than angle C.</p>  <p style="text-align: center;"><b>True</b></p>	<p>Which of these shapes contains the largest angle?</p> <p style="text-align: center;"><b>Shape B</b></p> 
<p>Zane is discussing angles.</p> <p style="text-align: center;"><b>Zane might be correct but he doesn't know the exact size of the other obtuse angle which could be larger.</b></p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><math>135^\circ</math> angle is the largest angle.</p> </div> <p>Is Zane correct? Explain your answer.</p>	<p>Hal is discussing angles.</p> <p style="text-align: center;"><b>Hal is correct. The obtuse angle is the largest and the acute and <math>25^\circ</math> angles are less than <math>90^\circ</math>.</b></p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>largest angle.</p> </div> <p>Is Hal correct? Explain your answer.</p>
<p>If you join together the end points of the matching lines below, do they make 4 angles in order from smallest to largest?</p> <p style="text-align: center;"><b>No. The correct order would be 2, 1, 3, 4.</b></p> 	<p>If you join together the end points of the matching lines below, do they make 4 angles in order from largest to smallest? Be sure to compare the smallest side of each angle created.</p> <p style="text-align: center;"><b>Yes, the angles are ordered correctly.</b></p> 