

Identify Angles

1a. Match the angles which will still be acute when they are combined.

60°

40°

30°

25°

75°

10°



PS

Identify Angles

1b. Match the angles which will still be acute when they are combined.

20°

65°

40°

15°

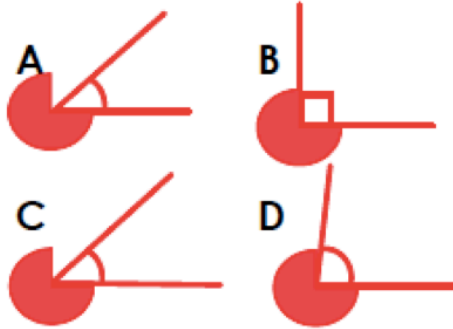
50°

40°



PS

2a. Which angle is the odd one out?

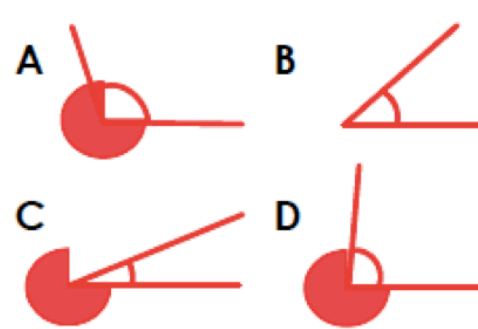


Explain your answer.



R

2b. Which angle is the odd one out?



Explain your answer.



R

3a. Using the digits below how many acute angles can you create?

9

2

5

1



PS

3b. Using the digits below how many obtuse angles can you create?

8

7

1

6



PS

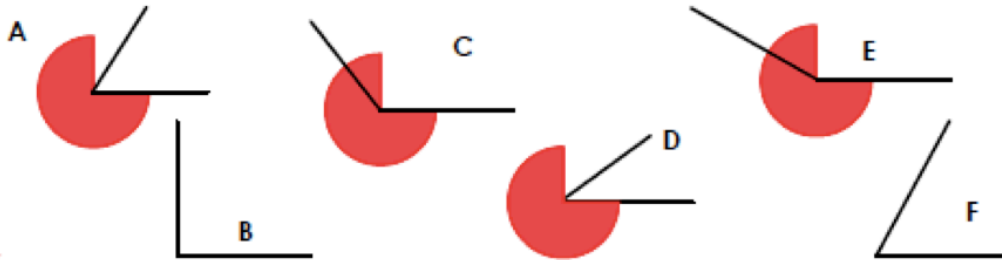
Identify Angles

1. Draw a line from each angle to the box it belongs to.

acute angles

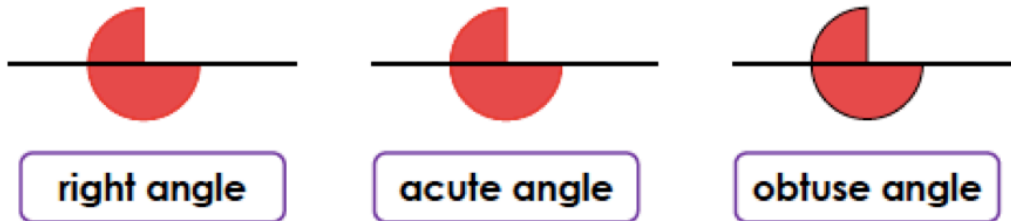
right angles

obtuse angles



VF
HW/Ext

2. Draw a line to create an angle that will match the given labels.



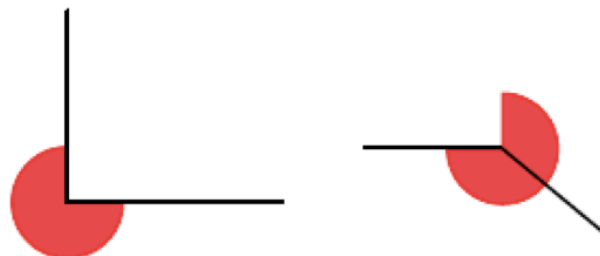
VF
HW/Ext

3. Fatma says:



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

Do you agree?



RPS
HW/Ext

Identify Angles

4a. Match the angles which will still be acute when they are combined.

| | |
|-----|-----|
| 67° | 56° |
| 23° | 19° |
| 75° | 14° |



PS

Identify Angles

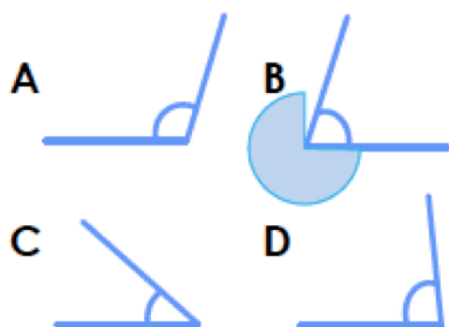
4b. Match the angles which will still be acute when they are combined.

| | |
|-----|-----|
| 33° | 56° |
| 14° | 66° |
| 5° | 79° |



PS

5a. Which angle is the odd one out?

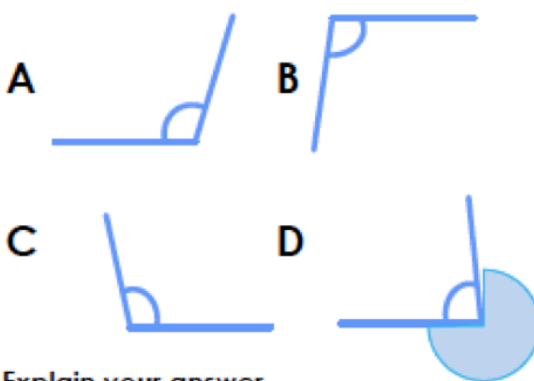


Explain your answer.



R

5b. Which angle is the odd one out?



Explain your answer.



R

6a. Using the digits below can you create more obtuse or acute angles?

| | | | |
|---|---|---|---|
| 3 | 7 | 5 | 4 |
|---|---|---|---|



PS

6b. Using the digits below can you create more obtuse or acute angles?

| | | | |
|---|---|---|---|
| 8 | 1 | 9 | 6 |
|---|---|---|---|



PS

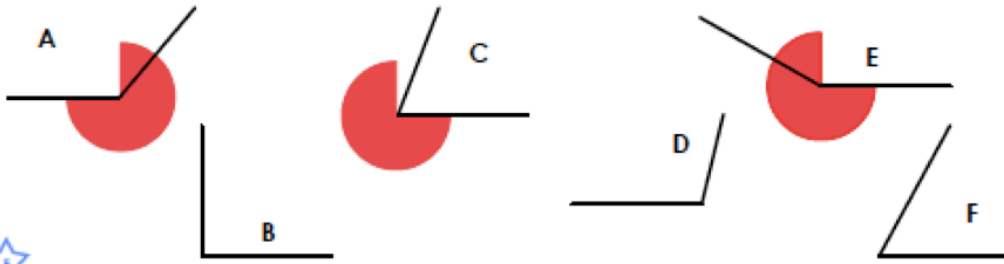
Identify Angles

4. Draw a line from each angle to the box it belongs to.

acute angles

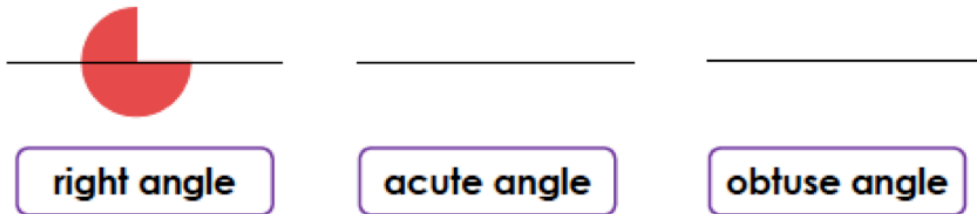
right angles

obtuse angles



VF
HW/Ext

5. Draw a line to create an angle that will match the given labels.



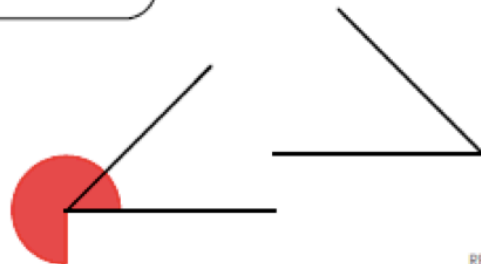
VF
HW/Ext

6. Ben says:



All acute angles are 45° .

Do you agree?
Draw your own angles to support your answer.



RPS
HW/Ext

Identify Angles

7a. What is the largest angle you can add to create an acute angle?

| | | |
|-----|---|--------|
| 67° | + | _____° |
| 23° | + | _____° |
| 85° | + | _____° |



PS

Identify Angles

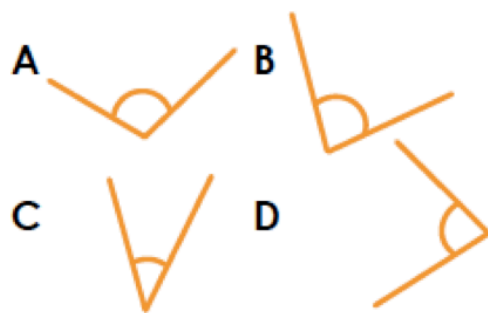
7b. What is the smallest angle you can add to create an obtuse angle?

| | | |
|-----|---|--------|
| 33° | + | _____° |
| 14° | + | _____° |
| 5° | + | _____° |



PS

8a. Which angle is the odd one out?

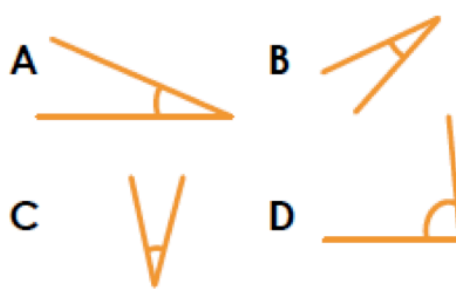


Explain your answer.



R

8b. Which angle is the odd one out?



Explain your answer.



R

9a. Using the digits below can you create more obtuse or acute angles?

| | | | |
|---|---|---|---|
| 1 | 9 | 2 | 9 |
|---|---|---|---|



PS

9b. Using the digits below can you create more obtuse or acute angles?

| | | | |
|---|---|---|---|
| 2 | 4 | 8 | 1 |
|---|---|---|---|



PS

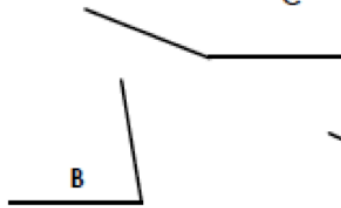
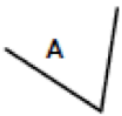
Identify Angles

9. Draw a line from each angle to the box it belongs to.

acute angles

right angles

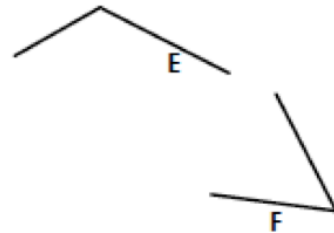
obtuse angles



C



D



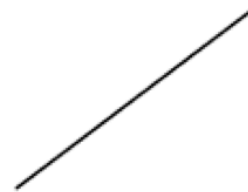
E

F



VF
HW/Ext

8. Draw a line to create an angle that will match the given labels.



right angle

acute angle

obtuse angle

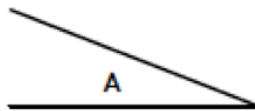


VF
HW/Ext

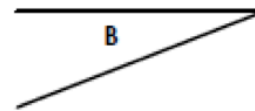
9. Evie says:



Angle A is different to angle B because it is facing in a different direction.



A



B

Do you agree?

Draw your own angles to support your answer.



RPS
HW/Ext

Reasoning and Problem Solving
Identify Angles

Developing

- 1a. $60^\circ - 25^\circ$; $30^\circ - 40^\circ$; $75^\circ - 10^\circ$.
 2a. B is the odd one out as it is a right angle and the other angles are all acute.
 3a. I can make 9 acute angles; 29° , 25° , 21° , 59° , 52° , 51° , 19° , 12° and 15° .

Expected

- 4a. $67^\circ - 19^\circ$; $23^\circ - 79^\circ$; $75^\circ - 14^\circ$.
 5a. A is the odd one out as it is an obtuse angle and the others are all acute angles.
 6a. I can only create acute angles; 37° , 35° , 34° , 73° , 75° , 74° , 53° , 57° , 54° , 43° , 47° , 45° .

Greater Depth

- 7a. $67^\circ + 22^\circ$, $23^\circ + 66^\circ$, $85^\circ + 4^\circ$
 8a. A is the odd one out as it is an obtuse and the others are all acute.
 9a. I can create the same amount for each; acute = 19° , 12° , 21° , 29°
 obtuse = 91° , 92° , 99° , 129° .

Homework/Extension
Identify Angles

Developing

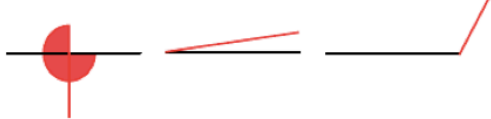
1. Acute angles – A, D, F; right angles – B; obtuse angles – C, E
 2. Various possible answers, for example:



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

Expected

4. Acute angles – C, F; right angles – B; obtuse angles – A, D, E
 5. Various possible answers, for example:



6. Ben is incorrect. Acute angles are any angles that are less than 90° . Children to draw any acute angle to support their answer. For example:



Greater Depth

7. Acute angles – A, B, D, F; obtuse angles – C, E
 8. Various possible answers, for example:



9. Evie is incorrect because angle A and angle B are the same. The size of the angle does not change if it is presented using a different direction. Children to draw two angles that are the same size in a different directions. For example:



Reasoning and Problem Solving
Identify Angles

Developing

- 1b. $20^\circ - 65^\circ$; $40^\circ - 40^\circ$; $50^\circ - 15^\circ$.
 2b. A is the odd one out as it is an obtuse angle and all the other angles are acute.
 3b. I can make 4 obtuse angles; 178° , 176° , 167° , and 168° .

Expected

- 4b. $33^\circ - 56^\circ$; $14^\circ - 66^\circ$; $5^\circ - 79^\circ$.
 5b. D is the odd one out as it is an acute angle and the others are all obtuse.
 6b. I can create more acute angles; acute = 81° , 89° , 86° , 18° , 19° , 16° , 68° , 61° , 69° ;
 obtuse = 91° , 96° , 98° , 168° , 169° .

Greater Depth

- 7b. $33^\circ + 58^\circ$, $14^\circ + 77^\circ$, $5^\circ + 86^\circ$
 8b. D is the odd one out as it is more than 45° . The other angles are all less than 45° .
 9b. I can create more angles that are acute; acute = 24° , 28° , 21° , 42° , 48° , 41° , 82° , 84° , 81° , 12° , 14° , 18°
 obtuse = 124° , 128° , 142° , 148° .