

MOTHERCARE PREPARATORY SCHOOLS

P.5 HOLIDAY WORK - WEEK 3

MATHEMATICS

Name: _____ Stream: _____

TOPIC : Line, Angles and Geometry figures.

: Complementary and supplementary Angles.

1. Complementary angles are two angles with the sum of 90° .
2. Supplementary angles are two angles with the sum of 180° .

Finding the complementary angles.

1. Find the complement of 72° .

Let the complement be m .

$$m + 72^\circ = 90^\circ$$

$$m + 72^\circ - 72^\circ = 90^\circ - 72^\circ$$

$$\underline{m = 18^\circ}$$

The complement of 72° is 18° .

Find the supplementary angles

1. Find the supplement of 70° .

Let the supplement of 70° be y .

$$y + 70^\circ = 180^\circ$$

$$y + 70^\circ - 70^\circ = 180^\circ - 70^\circ$$

$$\underline{y = 110^\circ}$$

The complement of 70° is 110° .

ACTIVITY

1. x and 60° are complementary angles. Find the value of x .
2. Find the complement of 68° .
3. If K and 80° are complementary angles. Find the value of k .

4. $2y$ and 50° are complementary angles. Find the value of x .

5. What is the complement of 88° ?

6. Find the supplement of 45° .

7. The supplement of P is 122° . Find the value of p.

8. $4f$ and 80° are supplementary angles, workout the value of F.

9. Given that $2n$ and n are supplementary angles.

(a) Find the value of n .

(b) What is the size of the larger angle?

10. If x and $(x + 10^\circ)$ are complementary angles. Find the value of x .

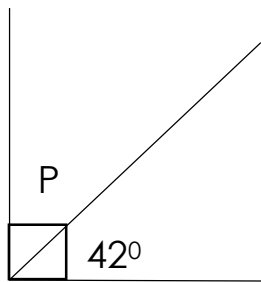
11. Given that $4y$ and $6y$ are supplementary angles.

a) Find the value of y in degrees.

b) What is the size of the smaller angle?

FINDING THE MISSING ANGLES

1. Find the size of angle P.

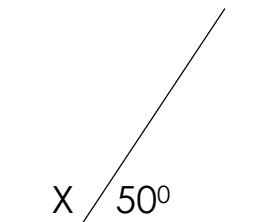


$$P + 42^{\circ} = 90^{\circ}$$

$$P + 42^{\circ} - 42^{\circ} = 90^{\circ} - 42^{\circ}$$

$$\underline{P = 48^{\circ}}$$

2. Find the size of angle X.

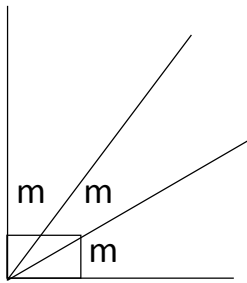


$$X + 50^{\circ} = 180^{\circ}$$

$$X + 50^{\circ} - 50^{\circ} = 180^{\circ} - 50^{\circ}$$

$$\underline{X = 130^{\circ}}$$

3. Find the value of m.



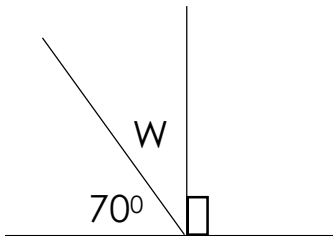
$$m + m + m = 90^\circ$$

$$\cancel{1} \underline{3m} = \frac{30}{\cancel{90}^\circ}$$

$$\cancel{1} \cancel{3} \underline{m} = \cancel{3} \cancel{1}^\circ$$

$$\underline{\underline{m = 30^\circ}}$$

4. Find the value of W.



$$W + 70^\circ + 90^\circ = 180^\circ$$

$$W + 160^\circ = 180^\circ$$

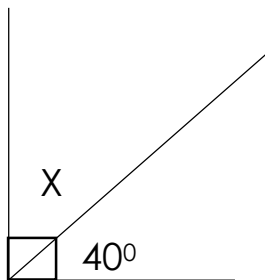
$$W + 160^\circ - 160^\circ = 180^\circ - 160^\circ$$

$$\underline{\underline{W = 20^\circ}}$$

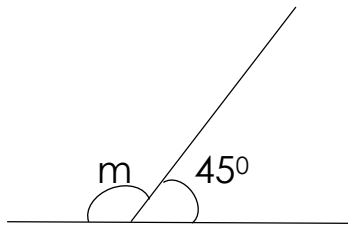
ACTIVITY

Find the size of the angles marked with letters.

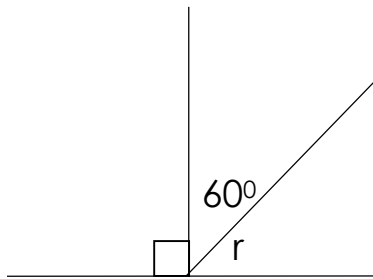
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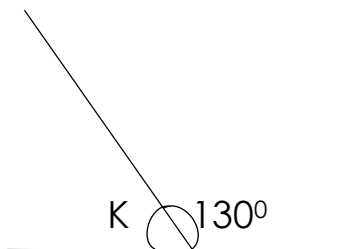
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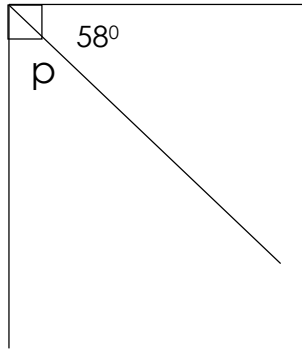
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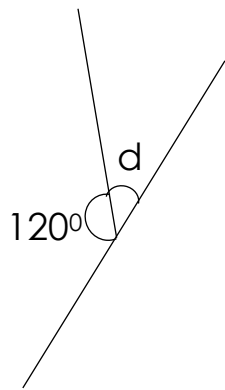
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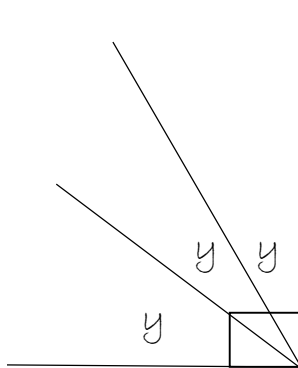
5.



6.



7.



END