Name: _____ ( ) Class: ____ Date: _____

Chapter 6.1

1. In each of the following, round off the following numbers to the number of significant figures given.

		3 249 650	43.038 241	0.020 485 32
(a)	correct to 2 significant figures			
(b)	correct to 3 significant figures			
(c)	correct to 4 significant figures			

2. Estimate the value of each of the following by rounding off each number to 1 significant figure.

(a) 1930 – 812 – 649 + 751

(b) (42.13 + 5.6732) × (1.125 – 0.473)

3. 450 g of brand A tea, 550 g of brand B tea and 100 g of brand C tea are mixed. The mixed tea is then packed into 7 small packs of equal weight. Find the weight of tea in each small pack, correct to 3 significant figures.

Name: _____ ( ) Class: ____ Date: _____

Chapter 6.2

1. In each of the following, choose an appropriate degree of accuracy. Mark your answer with a '✓' in the box.

(a)	The weight of an apple.	☐ correct to the nearest kg ☐ correct to the nearest g ☐ correct to the nearest 0.1 g
(b)	The length of a walking trail crossing a country park.	☐ correct to the nearest km ☐ correct to the nearest cm ☐ correct to the nearest mm
(c)	The record of a 110 m hurdle race in an olympic game.	☐ correct to the nearest s ☐ correct to the nearest 0.1 s ☐ correct to the nearest 0.01 s
(d)	The number of visitors visiting a shopping mall in a month.	☐ correct to the nearest unit ☐ correct to the nearest 1000 ☐ correct to the nearest 1 000 000

2. Fill in the blanks with suitable units of measurements.

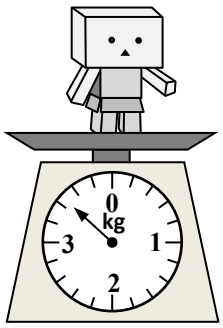
(a) The volume of a box of juice is 500 _____ .

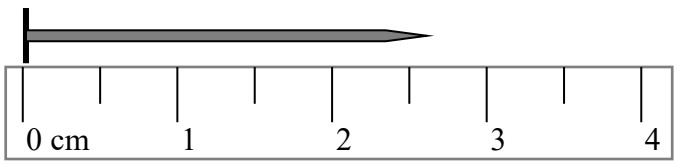
(b) The weight of a new born baby is 3.2 _____ .

(c) The weight of the calculator is 120 _____ .

(d) The length of the Hong Kong Cross Harbour Tunnel is 1.86 _____ .

3. Write down the measurement in each of the following figures.





(a) Weight of the toy robot = _____, *cor. to the nearest 0.2 kg*

(b) Length of the nail = _____, *cor. to the nearest 0.5 cm*

Name: _____ ( ) Class: ____ Date: _____ Marks: ____/8 Time: 8 minutes

Chapter 6.3

1. The figure shows a tetra pack drink and a potted plant. Given that the height of the tetra pack drink is 10.5 cm, correct to the nearest 0.1 cm. Estimate the height of the potted plant.

2. The weight of a pack of frozen chicken wings is 1.2 kg. The pack has about 40 chicken wings. Estimate the weight of one chicken wing.

3. If the length of a side of a square is estimated to be 12.5 cm, estimate its perimeter.

4. It takes the teacher about 4 minutes to mark a test paper. Estimate the time for the teacher to finish marking test papers for a class of 35 students.

Name: _____ ( ) Class: ____ Date: _____

Chapter 6.4

1. Find the absolute error of each of the following approximations.

(a) 34 215 is rounded off to 2 significant figures

(b) 0.2375 is rounded off to the 2 decimal places

2. Find the maximum absolute error of each of the following approximate values.

(a) 8.2 m, correct to the nearest 0.1 m

(b) 60 kg, correct to the nearest 5 kg

(c) 14.6 L, correct to 3 significant figures

3. The weight of an egg is measured to be 58.6 g, correct to the nearest 0.2 g.

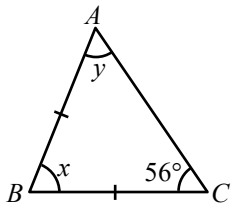
(a) Find the maximum absolute error of this measured weight.

(b) Find the range of the actual weight of this egg.

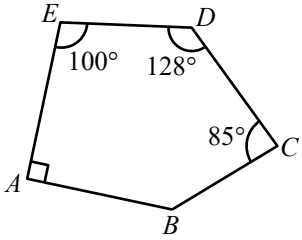
Name: _____ ( ) Class: ____ Date: _____

Chapter 8 (I)

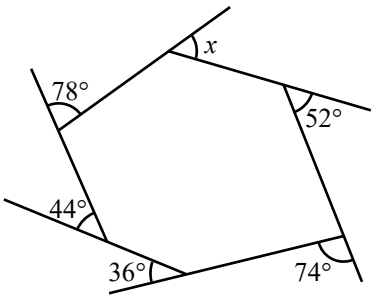
1. Find x and y in the figure.



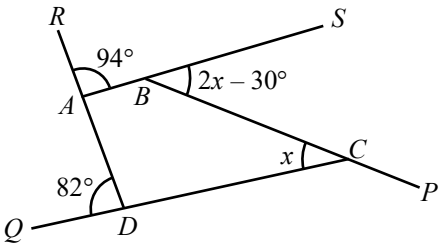
2. Find $\angle ABC$ in the figure.



3. Find x in the figure.



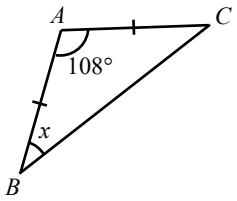
4. In the figure, ABS, BCP, CDQ and DAR are straight lines. Find x.



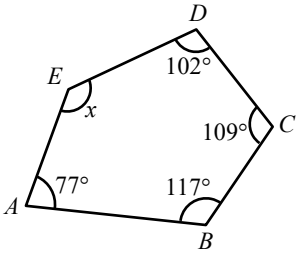
Name: _____ ( ) Class: _____ Date: _____

Chapter 8 (II)

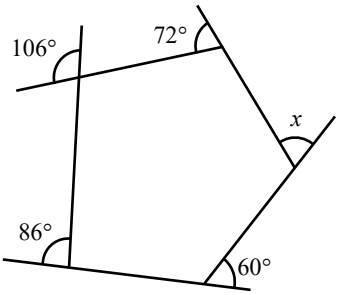
1. In the figure, find x.



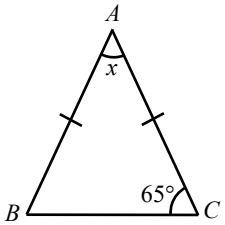
2. In the figure, find x.



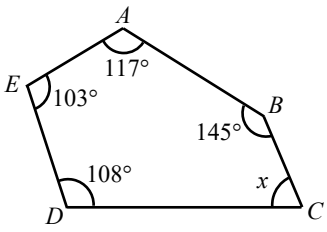
3. In the figure, find x.



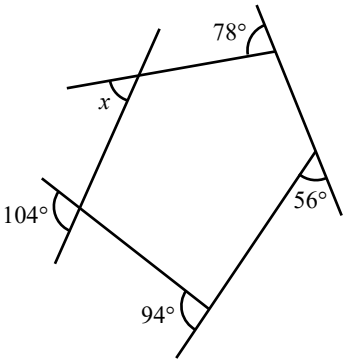
4. In the figure, find x.



5. In the figure, find x.



6. In the figure, find x.

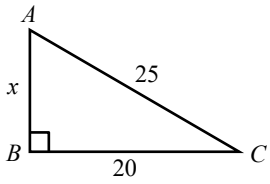


Name: _____ ( ) Class: _____ Date: _____

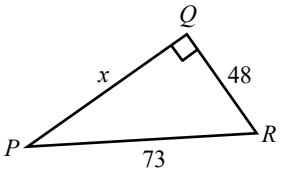
Chapter 9

1. Find the unknown(s) in each of the following figures.

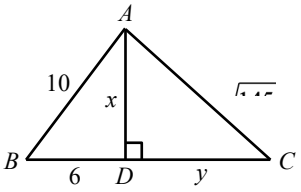
(a)



(b)

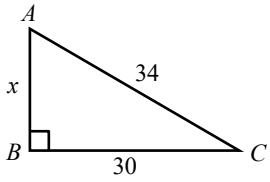


(c) *BDC* is a straight line.

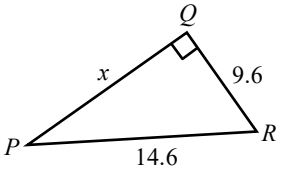


2. Find the unknown(s) in each of the following figures.

(a)



(b)



(c) *QSR* is a straight line.