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5

Homework Book

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HOMEWORK DIARY

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			Parent	Teacher
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5	1A Place value			
6	1B Rounding numbers			
7	1C Addition			
8	1D Subtraction			
9	Review of Chapter 1			
10	MULTIPLYING AND DIVIDING WHOLE NUMBERS (Chapter 2)			
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15	ANGLES AND LINES (Chapter 3)			
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17	3C Constructing angles			
18	3D Lines			
19	3E Parallel lines			
19	Review of Chapter 3			
21	POLYGONS, CIRCLES, AND SOLIDS (Chapter 4)			
21	4A Polygons			
21	4B Triangles			
22	4C Quadrilaterals			
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24	4G Drawing solids			
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			Parent	Teacher
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27	5A Representing fractions			
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31	5F Proper and improper fractions			
33	Review of Chapter 5			
34	DECIMAL NUMBERS (Chapter 6)			
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36	6C Ordering decimals			
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39	6F Multiplying decimals by 10			
39	6G Dividing decimals by 10			
40	6H Multiplying decimals by a whole number			
40	6I Dividing decimals by a whole number			
41	6J Using a calculator			
41	Review of Chapter 6			
43	TIME (Chapter 7)			
43	7A Analogue time			
43	7B Digital time			
44	7C Units of time			
45	7D Time calculations			
46	7E 24-hour time			
47	7F Time zones			
47	Review of Chapter 7			

HOMEWORK DIARY

Page	Homework	Due	Signed	
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49	8A Length			
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51	8C Area			
52	Review of Chapter 8			
54	MONEY (Chapter 9)			
54	9A Money			
54	9B Counting money			
55	9C Adding and subtracting with money			
57	9D Rounding and estimating			
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65	FURTHER MEASUREMENT (Chapter 10)			
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70	PROBABILITY (Chapter 11)			
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71	11B Possible outcomes			
72	11C Calculating probabilities			
73	Review of Chapter 11			

Page	Homework	Due	Signed	
			Parent	Teacher
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75	12A Number sequences			
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76	12C Sequences involving fractions			
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81	LOCATION AND POSITION (Chapter 13)			
81	13A Position			
81	13B Map references			
82	13C Finding points			
83	13D Compass points			
83	13E Maps with scales			
85	Review of Chapter 13			
87	TRANSFORMATIONS (Chapter 14)			
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89	Review of Chapter 14			
91	STATISTICS (Chapter 15)			
91	15A Categorical data			
91	15B Displaying categorical data			
93	15D Numerical data			
93	Review of Chapter 15			

CHAPTER 2: MULTIPLYING AND DIVIDING WHOLE NUMBERS

2A

MULTIPLICATION

REMINDER

The **multiples** of any whole number are obtained by multiplying it by 1, then 2, then 3, then 4, and so on.

1 List the first ten multiples of 8.

2 List the multiples of 6 which are between 20 and 50.

3 **a** List the first twelve multiples of 4.

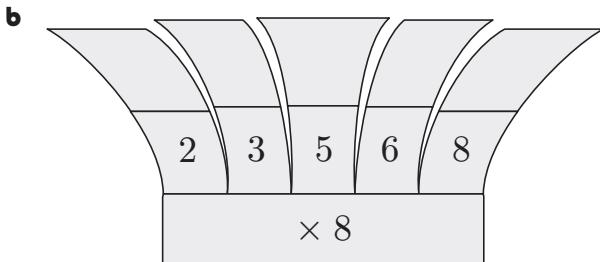
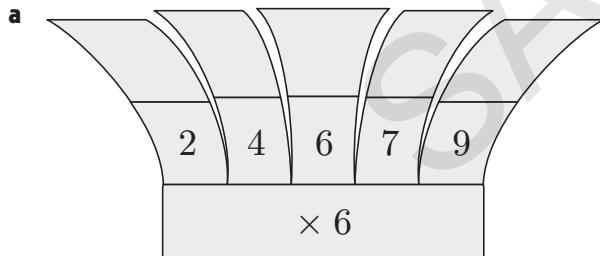
b Use your list to determine which of these numbers are multiples of 4:

i 14

ii 28

iii 42

4 Complete these multiple trees:



5 **a** List the first twelve multiples of 6.

b List the first ten multiples of 9.

c Write down the numbers less than 90 which are multiples of both 6 and 9.

6 Find the missing numbers:

a $6 \times \square = 30$

b $\square \times 3 = 24$

7 Find the missing numbers in each equation:

a $4 \times 6 = 12 \times \square$

b $2 \times 6 = \square \times 4$

c $6 \times \square = 3 \times 12$

d $9 \times 2 = \square \times 3$

REMINDER

When multiplying a whole number by 10, we place **one zero** on the end of it.

When multiplying a whole number by 100, we place **two zeros** on the end of it.

When multiplying a whole number by 1000, we place **three zeros** on the end of it.

8 Find:

a 7×10

b 22×10

c 93×10

d 501×10

9 Find:

a 9×100

b 36×100

c 148×100

d 5617×100

10 Find:

a 5×1000

b 19×1000

c 624×1000

d 830×1000

11 What number could replace the box to make these true?

a $13 \times 10 = \square$

b $57 \times \square = 57000$

c $165 \times 100 = \square$

d $\square \times 482 = 48200$

12 Find:

a 8×50

b 9×90

c 11×600

d 7×4000

13 Complete these multiplications:

a
$$\begin{array}{r} 7 \ 3 \\ \times \ 5 \\ \hline \end{array}$$

b
$$\begin{array}{r} 5 \ 6 \\ \times \ 7 \\ \hline \end{array}$$

c
$$\begin{array}{r} 3 \ 8 \ 4 \\ \times \ 6 \\ \hline \end{array}$$

d
$$\begin{array}{r} 4 \ 2 \ 7 \\ \times \ 9 \\ \hline \end{array}$$

14 Find:

a 71×4

b 83×7

c 243×5

d 587×6

15 For each of the following multiplications:

- i estimate the value by rounding the first number to the nearest hundred
- ii find the exact value.

a 387×5

i

ii

b 615×7

i

ii

16 Find:

a
$$\begin{array}{r} 3 \ 7 \\ \times \ 1 \ 3 \\ \hline \end{array}$$

b
$$\begin{array}{r} 4 \ 5 \\ \times \ 1 \ 6 \\ \hline \end{array}$$

c
$$\begin{array}{r} 5 \ 8 \\ \times \ 1 \ 4 \\ \hline \end{array}$$

d
$$\begin{array}{r} 7 \ 4 \\ \times \ 1 \ 7 \\ \hline \end{array}$$

17 Find:

a 38×12

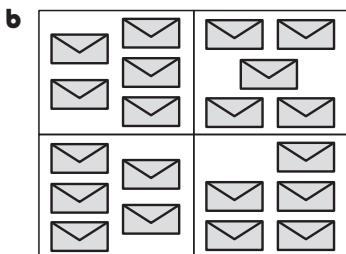
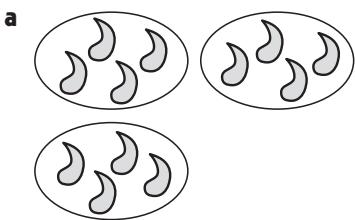
b 62×18

18 Ian filled six bags with mixed lollies so that each bag weighed 258 grams. What was the total mass of mixed lollies in the bags?

19 In one day, Sally sold 18 trays of mangoes. Each tray had 12 mangoes in it. How many mangoes did Sally sell in total?

2B**DIVISION**

- 1** What division is represented by these diagrams?



- 2** Use a diagram to find:

a $20 \div 5$

b $24 \div 4$

- 3** **a** Use a diagram to find:

i $5 \div 1$

ii $6 \div 6$

- b** Complete the following:

i When a number is divided by 1, the result is

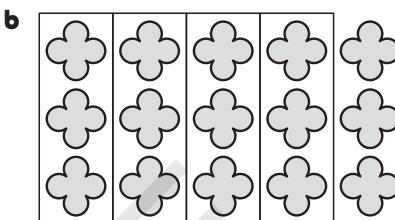
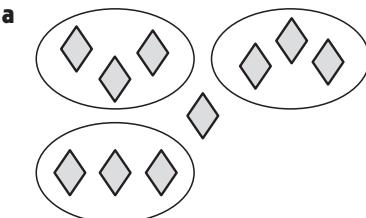
.....

ii When a number is divided by itself, the result is

REMINDER

When one whole number is divided by another, the result is not always a whole number. Sometimes we are left with a **remainder**.

- 4** What division is represented by these diagrams?



- 5** Use a diagram to find:

a $11 \div 5$

b $23 \div 6$

c $14 \div 8$

d $5 \div 7$

6 Complete these divisions:

a

$$3 \overline{)8\ 7}$$

$$\therefore 87 \div 3 =$$

b

$$4 \overline{)5\ 6\ 8}$$

$$\therefore 568 \div 4 =$$

c

$$5 \overline{)3\ 4\ 5}$$

$$\therefore 345 \div 5 =$$

d

$$6 \overline{)2\ 5\ 6\ 2}$$

$$\therefore 2562 \div 6 =$$

7 Find:

a $76 \div 4$

b $380 \div 5$

c $825 \div 3$

d $3493 \div 7$

8 Find:

a $59 \div 3$

b $94 \div 4$

c $186 \div 5$

d $734 \div 7$

e $2359 \div 6$

f $5158 \div 8$

9 The top of a 6-step staircase is 96 cm above the ground. The 6 steps are all equal in height. What is the height of each step?

10 David raised \$264 in one day from selling fruit cakes. Each cake was sold for \$8. How many fruit cakes did David sell?

11 A youth group bakes 365 honey biscuits to distribute equally amongst 9 charities.

a How many biscuits does each charity receive?

b How many biscuits will be left over?

2C

FACTORS

REMINDER

One whole number is a **factor** of another if the first number divides exactly into the second number, with no remainder.

1 **a** Is 4 a factor of 18?

b Is 6 a factor of 30?

2 Determine which of these numbers are factors of 20:

a 2

b 3

c 5

3 Complete these factor pairs:

a $24 = 4 \times \dots$

b $35 = 5 \times \dots$

4 List the factors of:

a 15

b 19

c 40

5 **a** List the factors of:

i 30

ii 50

b Which numbers are factors of both 30 and 50 ?

6 Find the only two numbers which are factors of 40 but are *not* factors of 20 .

REVIEW OF CHAPTER 2

1 List the multiples of 7 which are between 30 and 50 .

2 Find:

a 33×10

b 48×100

c 108×1000

3 Use a diagram to find:

a $21 \div 7$

4 **a** Is 3 a factor of 23 ?

b Is 7 a factor of 42 ?

5 Find:

a 6×40

b 146×7

6 Gillian deals out 52 cards equally between 7 people.

a How many cards does each person receive?

b How many cards are left over?

7 A school has 36 classrooms, and each classroom contains 15 desks. How many desks does the school have?

8 Find:

a $78 \div 3$

b $248 \div 4$

c $3816 \div 6$

d $2947 \div 5$

9 Complete these factor pairs:

a $22 = 2 \times \dots$

b $18 = 3 \times \dots$

c $13 = 13 \times \dots$

b $29 \div 8$

10 8 artists are each painting an equal length section of a mural on a wall. The wall is 3576 cm long. What length of wall does each artist paint?

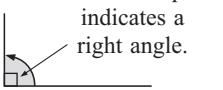
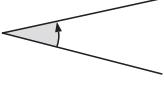
CHAPTER 3: ANGLES AND LINES

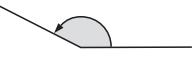
3A**ANGLES****REMINDER**

Revolution	Straight Angle
	

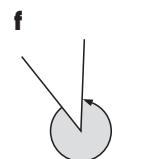
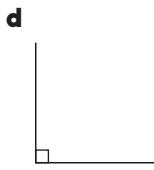
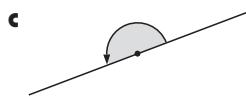
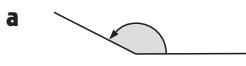
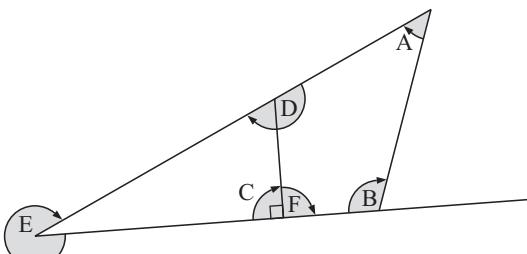
One complete turn.
One revolution = 360° .

$\frac{1}{2}$ turn
A straight angle = 180° .

Right Angle	Acute Angle
 <p>$\frac{1}{4}$ turn A right angle = 90°.</p>	 <p>Less than a $\frac{1}{4}$ turn An acute angle has size between 0° and 90°.</p>

Obtuse Angle	Reflex Angle
 <p>Between $\frac{1}{4}$ turn and $\frac{1}{2}$ turn. An obtuse angle has size between 90° and 180°.</p>	 <p>Between $\frac{1}{2}$ turn and 1 turn. A reflex angle has size between 180° and 360°.</p>

- 1** Classify the following angles as acute, right angle, obtuse, straight, reflex, or revolution:

**2**

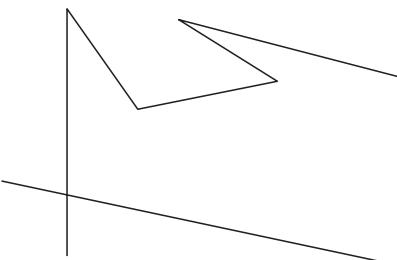
Classify the angle marked at:

- a** A **b** B

- c** C **d** D

- e** E **f** F

- 3** In the figure below, label all the acute angles with the letter A, and all the obtuse angles with the letter O.

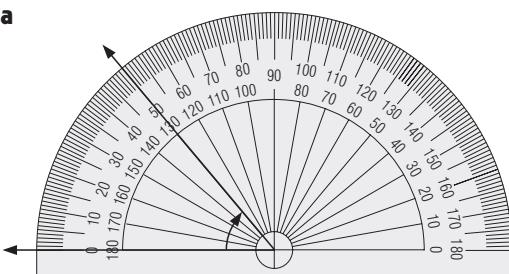


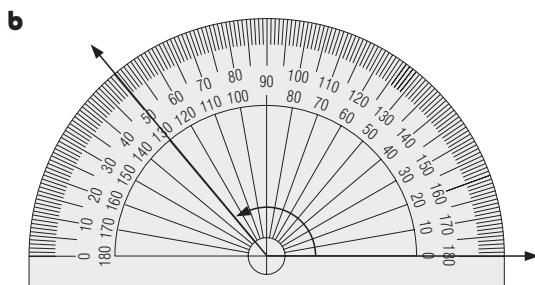
- 4** Sketch:

- a** a right angle **b** a reflex angle

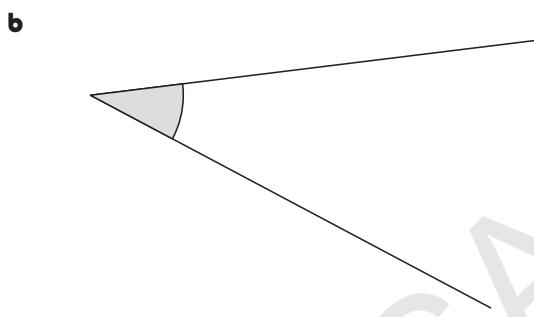
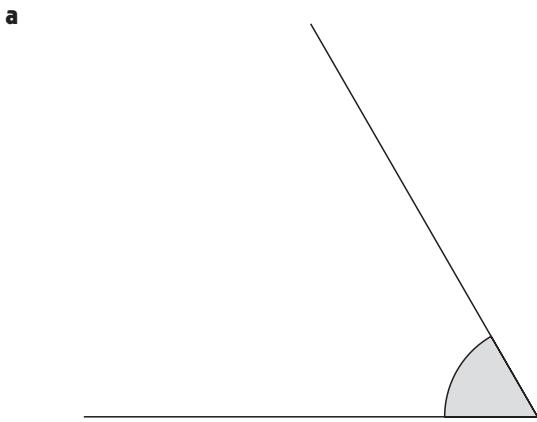
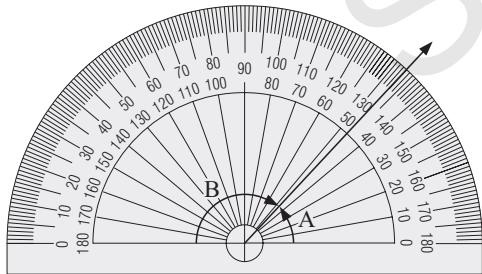
3B**MEASURING ANGLES**

- 1** Carefully measure each angle using the protractor. Write your answer using degrees $^\circ$.

a



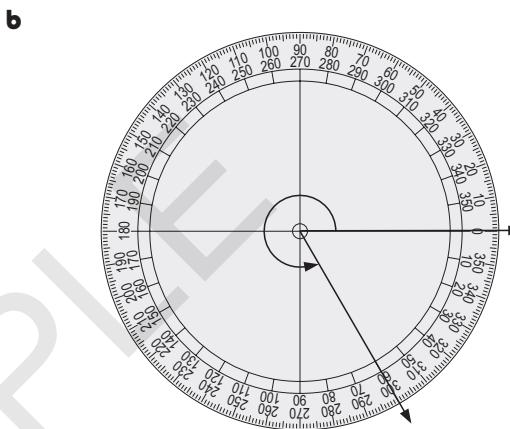
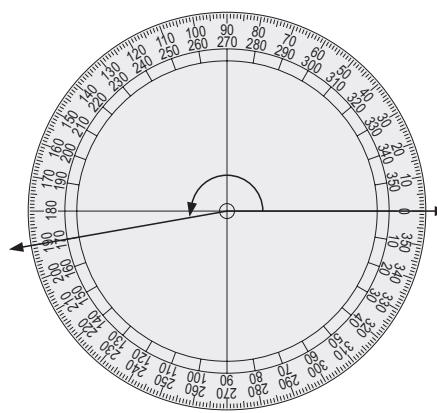
- 2** Use a protractor to measure each of the following angles. Write your answer in degrees °.

**3**

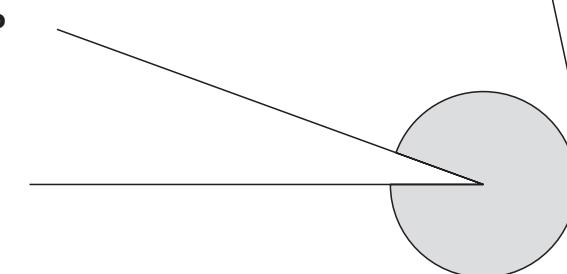
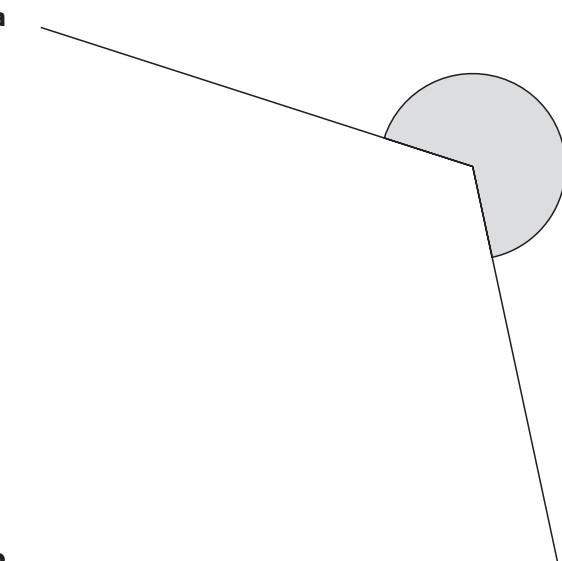
- a** Use the protractor to measure:
- i angle A
 - ii angle B
- b** Add together the sizes of angles A and B.

What do you notice?

- 4** Measure these reflex angles, giving your answers in degrees:



- 5** Measure these reflex angles, giving your answers in degrees:



3C**CONSTRUCTING ANGLES**

- 1** Use a protractor to draw these angles:

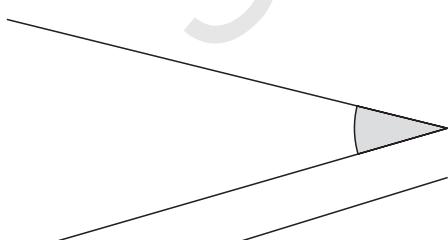
a 20°

b 130°

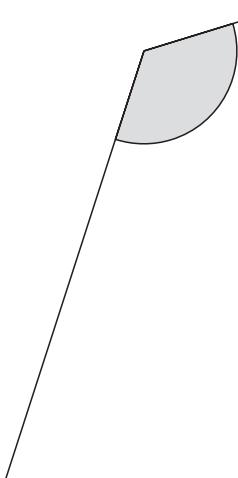
c 100°

- 2** Use your protractor to accurately measure these angles:

a



b



- 3** Use a protractor to construct these angles:

a 55°

b 145°

- 4** Faye is building a ramp in her garden. She decides that the angle of the ramp should be 15° . Draw the angle of the ramp.

- 5** Use a protractor to construct these angles:

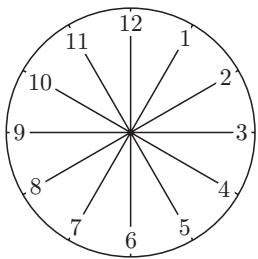
a 220°

b 340°

c 315°

- 6** Consider the circular clock face shown alongside.

a How many equal sections is the clock face divided into?



b The sections fit together at the centre to form a revolution. What is the angle of each section?

3D**LINES****REMINDER**

AB is the line between A and B.



Horizontal lines are drawn across the page from left to right.

A

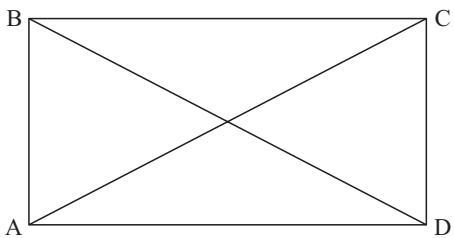
C

Vertical lines are drawn down the page from the top to the bottom.



Diagonal lines are drawn from corner to corner.

- 1** This diagram shows a rectangle.



a i How many horizontal lines does the figure have?

ii What are their names?

b i How many vertical lines does the figure have?

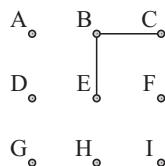
ii What are their names?

c i How many diagonal lines does this figure have?

ii What are their names?

d How many right angles does this figure have?

e How many acute angles does this figure have?



a DE and DH

b GH and HI

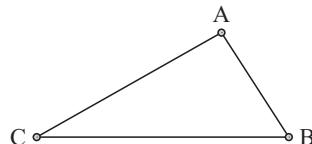
c HF and GH?

- 3** Draw a figure which contains:

a two acute angles and one obtuse angle

b two right angles, two obtuse angles, and one acute angle.

- 4** Look at the figure alongside.



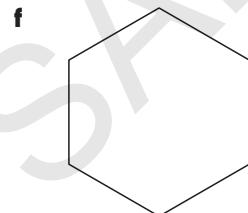
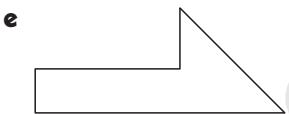
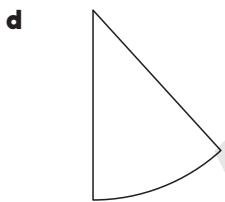
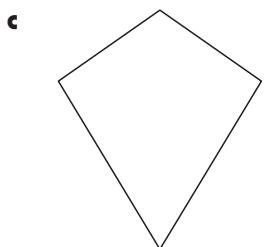
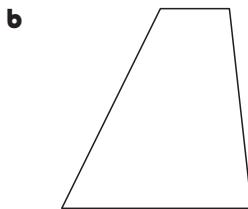
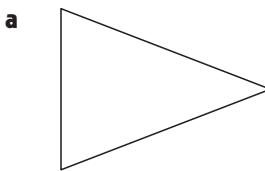
a At what point do the lines AC and BC meet?

b Which two lines meet at point B?

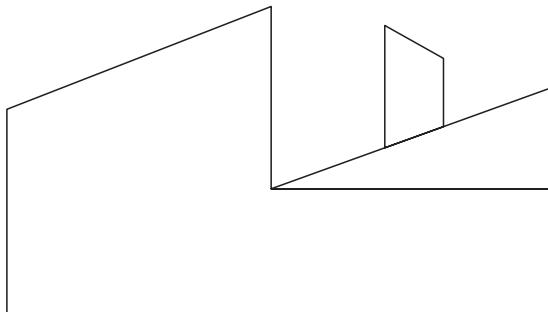
3E**PARALLEL LINES****REMINDER**

Parallel lines are lines which are always the same distance apart and never meet.

- 1** Which of these figures have parallel lines? If they contain parallel lines, how many sets are there?



- 2** Look at the figure below.



- a** Label any parallel lines with arrow heads.
- b** Label any acute angles with the letter A.
- c** Label any obtuse angles with the letter O.
- d** Label any right angles with the letter R.

REVIEW OF CHAPTER 3

- 1** Sketch an angle which is:

a acute

b straight

- 2** Which other name is given to an angle which measures exactly 360° ?

- 3** State whether the following are obtuse, acute, or reflex angles:

a 109°

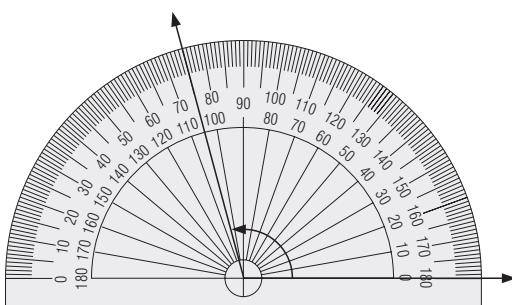
b 62°

c 189°

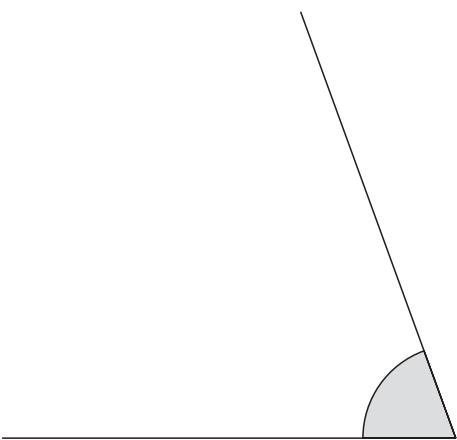
d 95°

- 4** Measure the following angles:

a



b

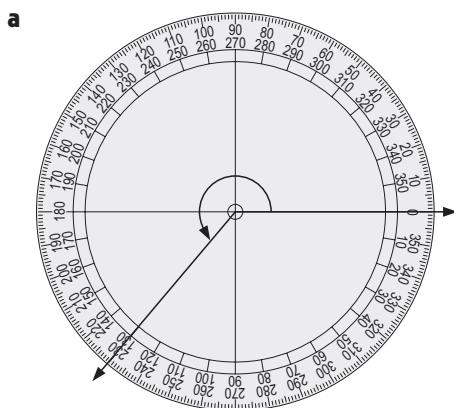


5 Use a protractor to draw these angles:

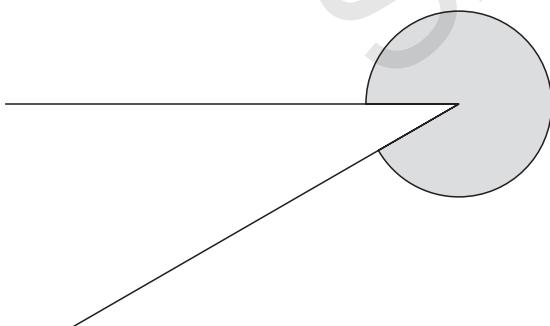
a 45°

b 150°

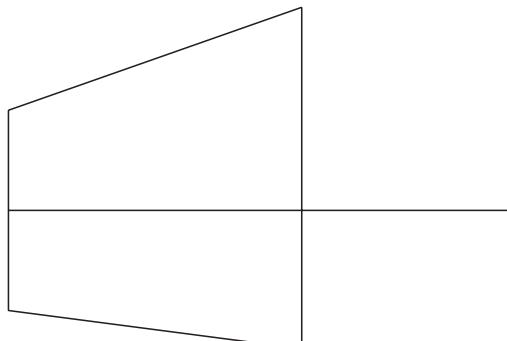
6 Measure these reflex angles:



b



7 Look at the figure below:

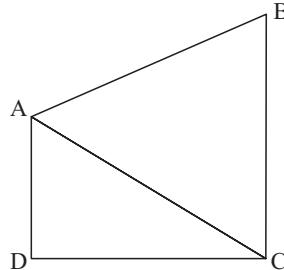


- a Label any parallel lines with arrow heads.
- b Label any diagonal lines with the letter D.
- c Label any horizontal lines with the letter H.
- d Label any vertical lines with the letter V.
- e Label any right angles with the letter R.
- f Label any obtuse angles with the letter O.
- g Label any acute angles with the letter A.

8 Explain, with the help of a diagram, what parallel lines are.

9 William is going down a slide at a park. The angle of the slide is 30° to the ground. Draw the angle of the slide.

10 Look at the figure below.



a Name any vertical lines.

b Name any horizontal lines.

c Name any diagonal lines.