| Name |  |
|---|---|
| Form |  |
| Teacher |  |

# Maths
# Homework Booklet
# Year 8 Summer 1
# Set P,1,2,3

| Topic | Score achieved | Sparx % |
|---|---|---|
| 1. Angles - Mixture | /18 | % |
| 2. Angles in a triangle | /15 | % |
| 3. Angles in a quadrilateral | /15 | % |
| 4. Angles in parallel lines | /16 | % |
| 5. Area of compound shapes | /12 | % |

# Week 1

(a) $x$   80°

(b) 140°   $x$   150°

(c) 65°   $x$

(d) 130°   120°   $x$

(e) $x$   163°

(f) 93°   130°   $x$   89°

(g) 13°   $x$

(h) $x$   43°

(i) 72°   $x$

(j) 120°   $x$

(k) 123°   95°   $x$   80°

(l) 39°   24°   $x$

(m) $x$   120°   141°

(n) 47°   26°   $x$

(o) 22°   70°   $x$

(p) 34°   $x$   21°

(q) 30°   $x$   26°   32°   26°

(r) 151°   $y$   $x$
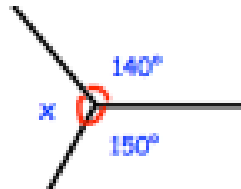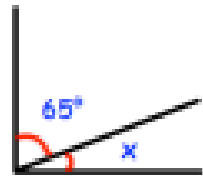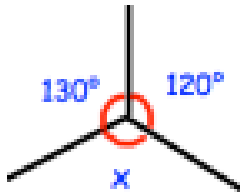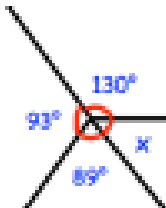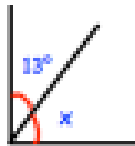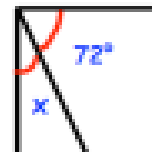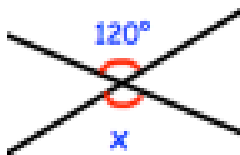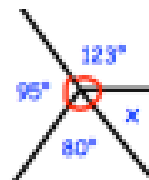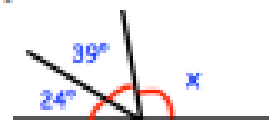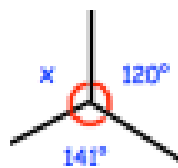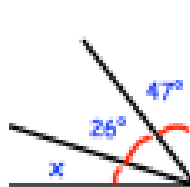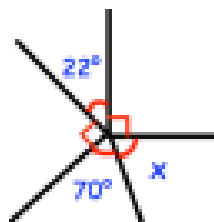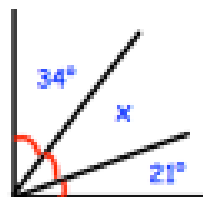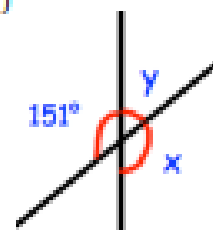
Sparx – Homework Answers

# Week 2

## Question 1: Find the size of each missing angle.

(a)

$x$, $80°$, $60°$

(b)

$75°$, $x$, $80°$

(c)

$40°$, $x$

(d)

$51°$, $47°$, $x$

(e)

$18°$, $25°$, $x$

(f)

$x$, $109°$, $32°$

(g)

$x$, $27°$

(h)

$x$, $36°$, $99°$

(i)

$81°$, $x$

## Question 2: Find the size of each missing angle.

(a)

$X$, $35°$

(b)

$30°$, $x$

(c)

$x$, $26°$
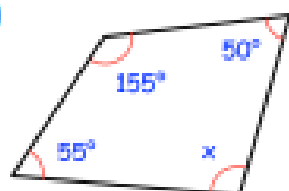
(d)

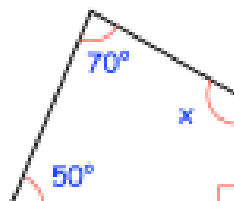$24°$, $x$

(e)

$x$, $61°$

(f)

$x$, $38°$

Sparx – Homework Answers

# Week 3

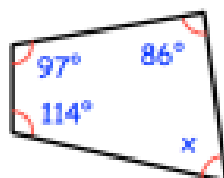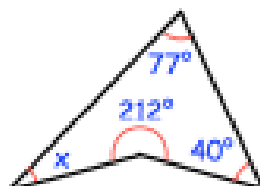**Question 1:**   Find the size of each missing angle.

**(a)**

155°    50°

55°    x

**(b)**

70°

x

50°

**(c)**

85°

45°    70°

x

**(d)**

97°    86°

114°

x

**(e)**

77°

212°

x    40°

**(f)**

x

52°

**(g)**

142°

88°    106°

x

**(h)**

115°  139°

x    41°

**(i)**

76°

135°

81°    x
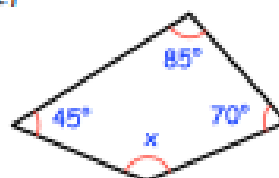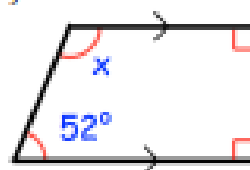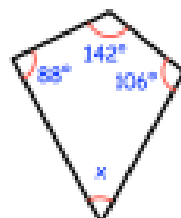
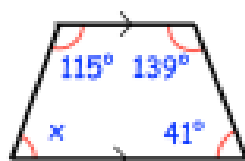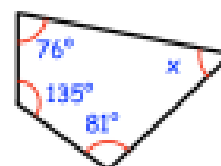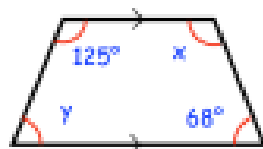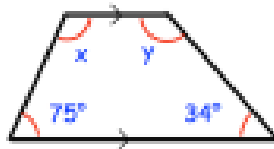**Question 2:**   Shown below are three trapezia.
Find the size of each missing angle.

**(a)**
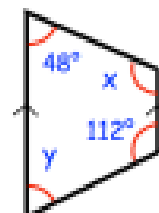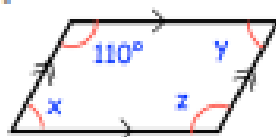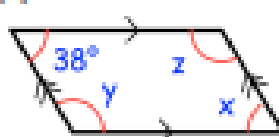
125°    x

y    68°

**(b)**

x    y

75°    34°

**(c)**

48°

x

112°

y

**Question 3:**   Shown below are three parallelograms.
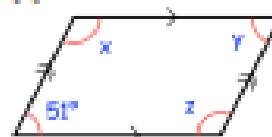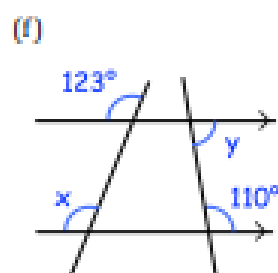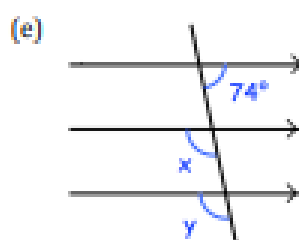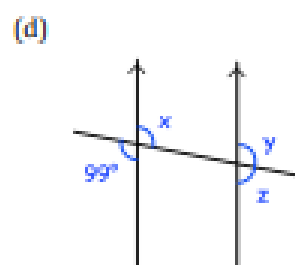Find the size of each missing angle.

**(a)**

110°    y

x    z

**(b)**

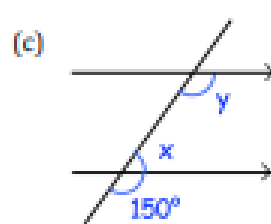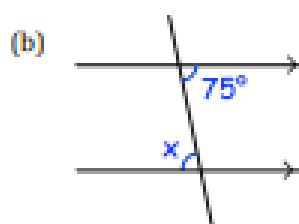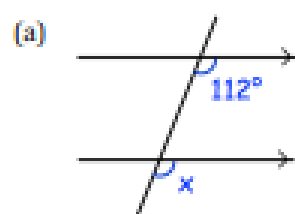38°    z

y

x

**(c)**

x    y

51°    z

Sparx – Homework Answers

# Week 4

**Question 1:** Write down the sizes of the lettered angles.

**(a)**

112°

x

**(b)**

75°

x

**(c)**

y

x

150°

**(d)**

x

99°

y

z

**(e)**

74°

x

y

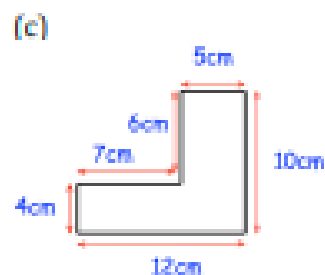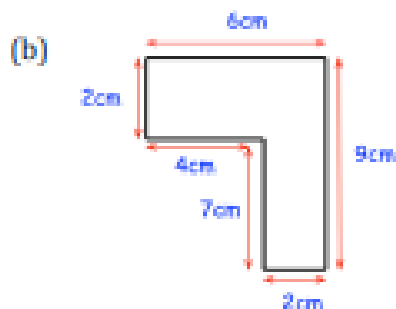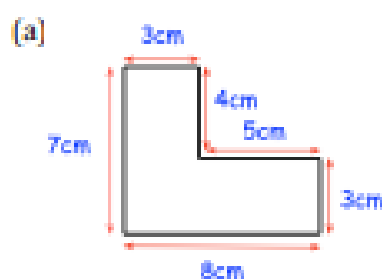**(f)**

123°

y

x

110°

**Question 2:**

a  b

d  c

e  f

h  g
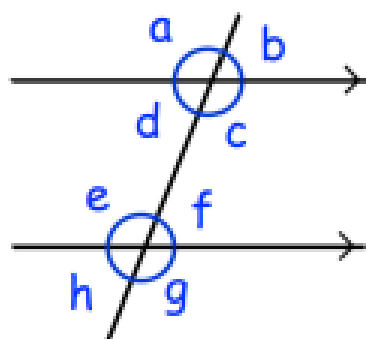
(a) Which angle is corresponding to angle c?

(b) Which angle is alternate to angle d?

(c) Which angle is corresponding to angle h?

(d) Which angle is vertically opposite to angle a?

(e) Which angle is alternate to angle e?

(f) Which angle is co-interior with angle c?

(g) Which angle is vertically opposite to angle h?

(h) Which angle is co-interior with angle e?

(i) Which angle is corresponding to angle a?

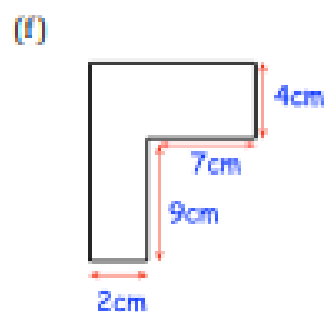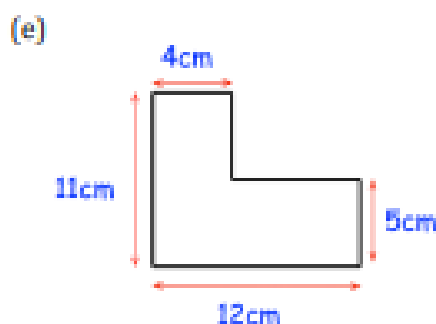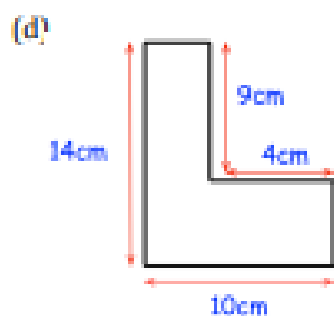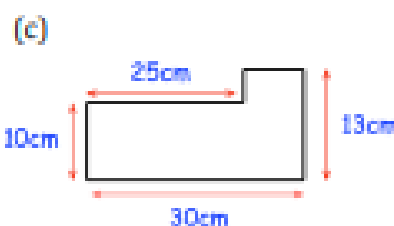(j) Which angle is vertically opposite to angle g?

Sparx – Homework Answers

# Week 5

## Question 1: Work out the area of each of these shapes.

(a)

3cm, 4cm, 5cm, 7cm, 3cm, 8cm

(b)

6cm, 2cm, 4cm, 9cm, 7cm, 2cm

(c)

5cm, 6cm, 7cm, 4cm, 10cm, 12cm

## Question 2: Work out the area of each of these shapes.

(a)

6cm, 15cm, 11cm, 8cm

(b)

6cm, 2cm, 3cm, 7cm

(c)

25cm, 10cm, 13cm, 30cm

(d)

9cm, 14cm, 4cm, 10cm

(e)

4cm, 11cm, 5cm, 12cm

(f)

4cm, 7cm, 9cm, 2cm
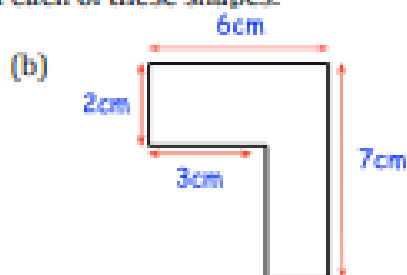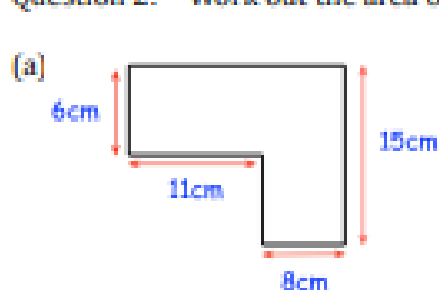
## Question 3: The area of each shape is given. Work out the size of the missing sides.

(a)

3cm, 12cm, x, 2cm

Total area = 48cm²

(b)

5cm, 7cm, 4cm, x

Total area = 91cm²

(c)

20cm, x, 15cm, 8cm

Total area = 228cm²

Sparx – Homework Answers