Chinese Development of Maths

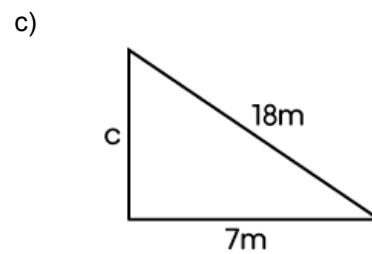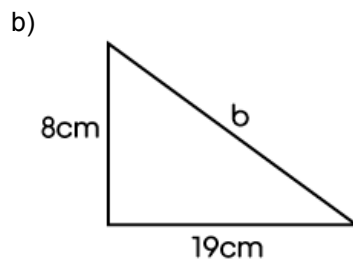NAME: ....

CLASS: ....

DATE: ....

Basic

1) Find the unknown side in each of the following:

a)

5cm
a
9cm

b)

8cm
b
19cm

c)

c
18m
7m

2) Find the circumference of each circle:

a)

D = 12cm

b)

D = 56cm

c)

D = 23m
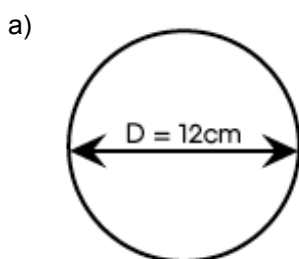
Basic

3) Find the area of each circle:
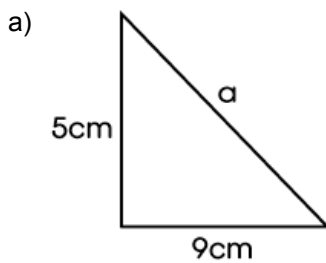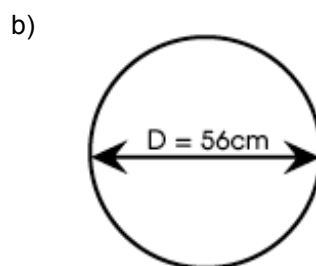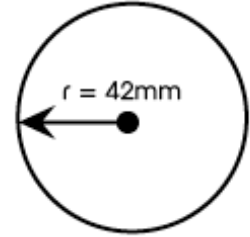
a)

r = 72cm

b)

r = 26m

c)

r = 42mm
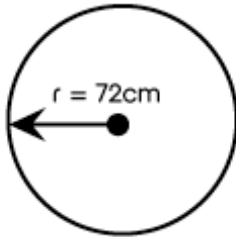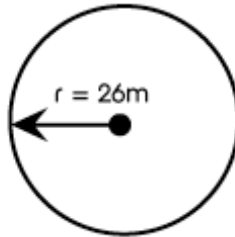
Chinese Development of Maths

NAME: ....

CLASS: ....

DATE: ....

Core

1) Find the length of the unknown side in each of the following:

a)

4cm, a, 4cm

b)

7cm, b, 17cm

c)

c, 22m, 8m

d)

18cm, d, 22cm

e)

27cm, 48cm, e

f)

f, 22m, 6m
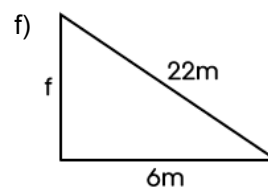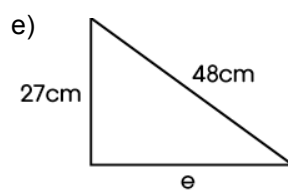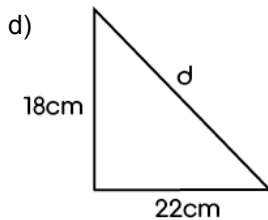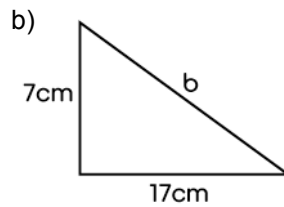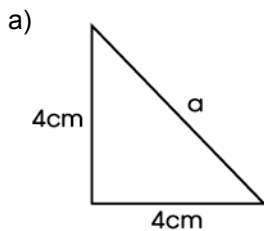
2) Find the area of each of the following circles:

a)

r = 17.5cm

b)

r = 42.8mm

c)

r = 37m
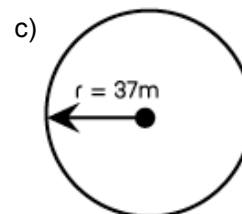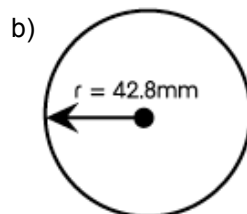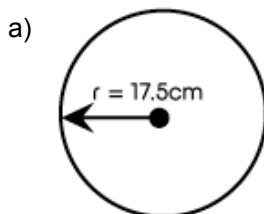
Core

3) Complete the following magic squares:

1			4
	6	7	
	10	11	
13			16

14	11	8	1
4	5		15
9	16	3	6

Chinese Development of Maths

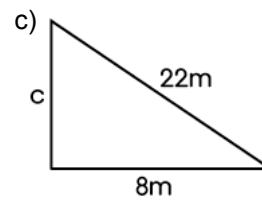NAME: ....

CLASS: ....

DATE: ....
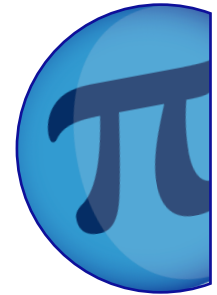
Advanced

1) Find the lengths of the unknown sides:

a)

15cm

x

17cm

b)

47cm

x

38cm

c)

x

72cm

27cm
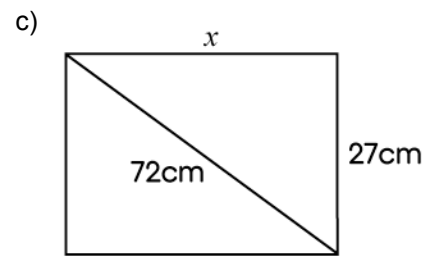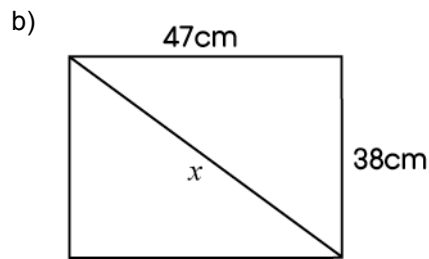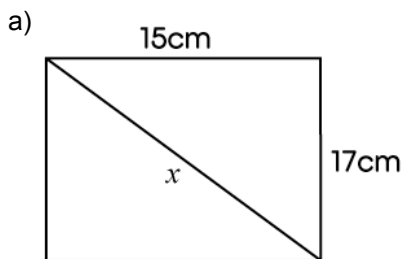
2) Complete the following magic squares:

6	20	11	
13	15	8	
		21	7
19	9		12

44	51	38	41
42	37		47
49	46	43	36

3) Complete Pascal's triangle by adding the two numbers below each circle:
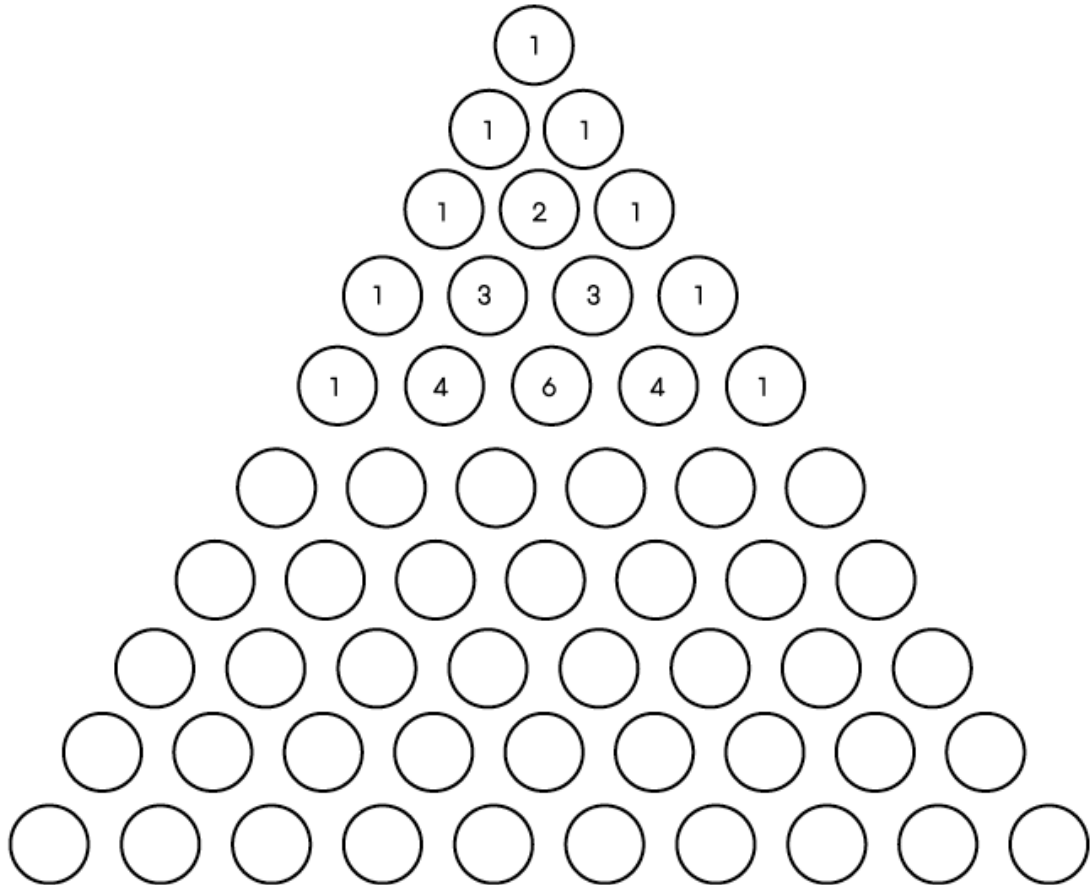
Chinese Development of Maths

ANSWERS

Basic

1) a) a = 10.3cm
b) b = 20.6cm
c) c = 16.6m

2) a) 37.7cm
b) 175.9cm
c) 72.3m

3) a) 16,286.02cm²
b) 2123.72m²
c) 5541.77mm²

Core

1) a) a = 5.7cm
b) b = 18.4cm
c) c = 20.5m

d) d = 28.4cm
e) e = 39.7cm
f) f = 21.2m

2) a) 962.11cm²
b) 5754.90mm²
c) 4300.84m²

3)

1	15	14	4
12	6	7	9
8	10	11	5
13	3	2	16

14	11	8	1
4	5	10	15
9	16	3	6
7	2	13	12

Advanced

1) a) 22.67cm
b) b = 60.44cm
c) c = 66.75cm

ANSWERS

Advanced continued ...

2)

6	20	11	17
13	15	8	18
16	10	21	7
19	9	14	12

44	51	38	41
42	37	48	47
49	46	43	36
39	40	45	50

3)

```
                    1
                 1     1
              1     2     1
           1     3     3     1
        1     4     6     4     1
     1     5    10    10     5     1
   1     6    15    20    15     6     1
  1    7    21    35    35    21    7    1
 1   8   28   56   70   56   28   8   1
1   9   36   84  126  126  84   36   9   1
```