

Maths Extenders



A stimulating resource for the
upper primary years providing
extension activities for
early finishers.

Ages 10 - 12

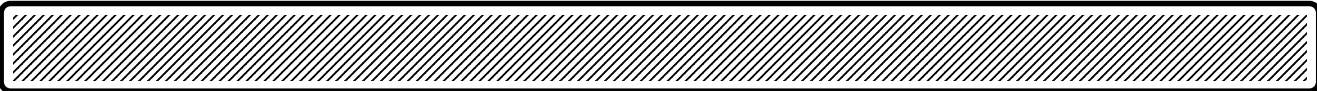


Revised edition. Written by David Stephenson. Illustrated by Rod Jefferson. © Ready-Ed Publications - 2007
Originally published by Ready-Ed Publications (1995) P.O. Box 276 Greenwood Western Australia 6024
Email: info@readyed.com.au Website: www.readyed.com.au

COPYRIGHT NOTICE

Permission is granted for the purchaser to photocopy sufficient copies for non-commercial educational purposes. However, this permission is not transferable and applies only to the purchasing individual or institution.

ISBN 1 86397 716 3



Contents

Extender Tasks 1	page 4
Extender Tasks 2	page 5
Extender Tasks 3	page 6
Extender Tasks 4	page 7
Extender Tasks 5	page 8
Extender Tasks 6	page 9
Extender Tasks 7	page 10
Extender Tasks 8	page 11
Extender Tasks 9	page 12
Extender Tasks 10	page 13
Extender Tasks 11	page 14
Extender Tasks 12	page 15
Extender Tasks 13	page 16
Extender Tasks 14	page 17
Extender Tasks 15	page 18
Extender Tasks 16	page 19
Extender Tasks 17	page 20
Extender Tasks 18	page 21
Extender Tasks 19	page 22
Extender Tasks 20	page 23
Extender Tasks 21	page 24
Extender Tasks 22	page 25
Extender Tasks 23	page 26
Extender Tasks 24	page 27
Extender Tasks 25	page 28
Extender Tasks 26	page 29
Extender Tasks 27	page 30
Answers	pages 31-36



In the Hen House

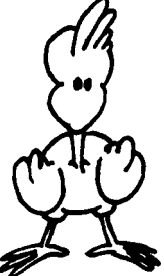
In a hatchery there are always 500 birds. If there are 110 more hens than roosters ...

a. How many hens and how many roosters would there be?
 _____ hens _____ roosters = 500 altogether.

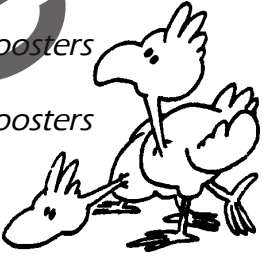


Now try these. Remember, there is always a total of 500 birds.

- b.** 60 more hens than roosters = _____ hens _____ roosters
- c.** 210 more hens than roosters = _____ hens _____ roosters
- d.** 96 more hens than roosters = _____ hens _____ roosters
- e.** 14 more hens than roosters = _____ hens _____ roosters
- f.** 332 more hens than roosters = _____ hens _____ roosters
- g.** 1 more hen than roosters = _____ hens _____ roosters



Will the final problem work? Why/Why not? _____



Calculations

Use a calculator to help locate the missing signs.

- a.** 900 300 40 = 15
- b.** 67 33 29 = 2182
- c.** 72 12 12 = 72
- d.** 30 15 45 8 = 480

Which is the largest and by how much?
 6⁴ or 4⁶ _____ by _____

Think Quick!

Potato chips cost 80c per 100 grams.
 How much would one tonne cost?

Answer: \$ _____

? Who was Pythagoras? _____

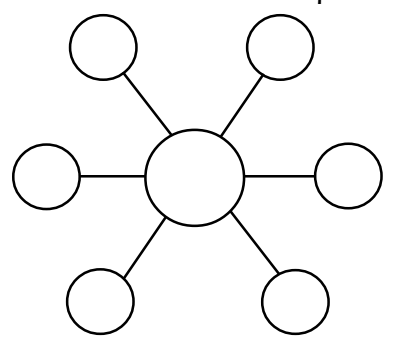
? List four facts about him.

- ?** • _____ • _____
- ?** • _____ • _____

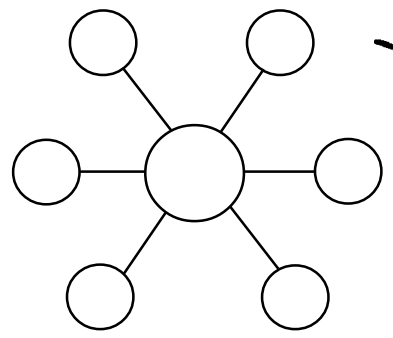
? Can you explain his theorem? (Use the back of this page.)

Patterned Response

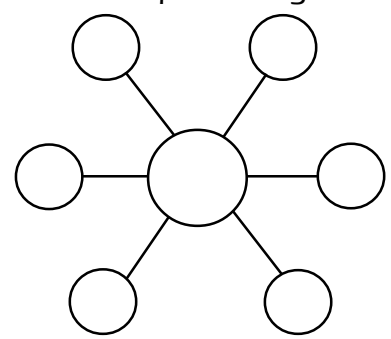
a. Place the numbers 1 to 7 so each line is equal.



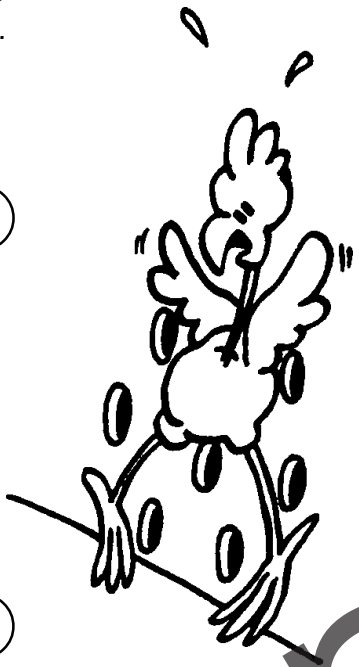
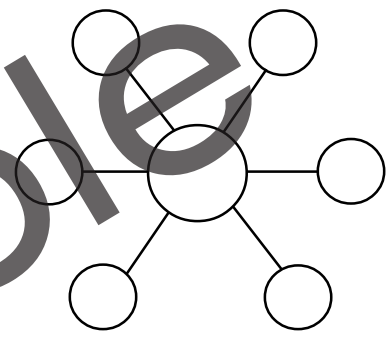
c. Now try 21 to 27.



b. Can you see the pattern? Now repeat using 11 to 17.

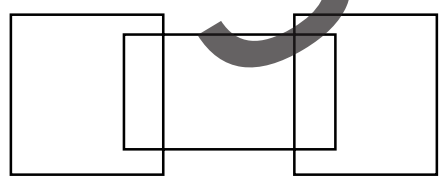


d. Now try 331 to 337.

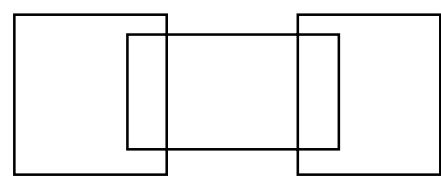


Square Up

Place the numbers 1, 2, 3, 4, 5 so that each large shape (box) adds up to 6. Use each number only once.



Now try 21, 22, 23, 24, 25 to equal 46. Explain your results _____



Patterns

Find the rule then complete the first grid. Create your own pattern in the second grid and challenge a friend to complete.

20	4		9
36	6		
		2	14
	5	2	
72		12	
	5	20	25

? Who was Archimedes?
 ? On the back of this sheet list six facts about him and explain his principle.
 ?
 ?
 ?
 ?
 ?
 ?
 ?

Sign Of The Times

A sign writer charges the following rates to paint letters.

A = \$1.00	B = \$2.00	C = \$3.00	D = \$4.00	E = \$5.00
F = \$6.00	G = \$7.00	H = \$8.00	I = \$9.00	J = \$10.00
K = \$11.00	L = \$12.00	M = \$13.00	N = \$14.00	O = \$15.00
P = \$16.00	Q = \$17.00	R = \$18.00	S = \$19.00	T = \$20.00
U = \$21.00	V = \$22.00	W = \$23.00	X = \$24.00	Y = \$25.00
Z = \$26.00				

What would the following signs have cost?

For Rent

\$ _____

Save

\$ _____

Zoological Gardens

\$ _____

Stop

\$ _____



Create signs costing the following values.

\$12.00

\$18.00

\$38.00

\$72.00

Find 20 words costing less than \$20.00

_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____
_____	\$ _____	_____	\$ _____

Think Quick!

Paint costs \$2.20 per 50mls. How much would it cost for a 2.5 L tin?

Answer:
\$ _____

? Which is smallest and by how much?
5³ or 3⁵

? _____

? _____

? _____

? _____

Squaring up

Find the pattern and complete these squares.

3		12
	6	30
15		18

9		63
		28
63		

	9	
		18
	54	24

		27
	8	
30		24

These add up

Using the digits 0, 1, 2, 3, 4, 5 complete these sums.

e.g.

$$\begin{array}{r} 14 \\ 20 \\ + 35 \\ \hline 69 \end{array}$$

$$\begin{array}{r} 41 \\ 25 \\ + 03 \\ \hline 69 \end{array}$$

<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
+ <u> </u>	+ <u> </u>	+ <u> </u>
87	87	87
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
+ <u> </u>	+ <u> </u>	+ <u> </u>
96	96	96
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

Discount

A video shop offers 25% off all games. Can you work out their new prices?

'Street Fighter' was **\$122.00**
Now: \$ _____

'NBA Jam' was **\$139.00**
Now: \$ _____

'Mario Bros' was **\$98.00**
Now: \$ _____

'Sonic' was **\$112.00**
Now: \$ _____

Research Time

What is a 24 hour clock? _____

Where is it used? _____

Complete this chart using the 24 hour clock.

	OUR TIME	24 HOUR TIME
a.	3.27 pm	
b.		2400
c.	11.49 pm	
d.	8.11 am	
e.		1321

?
?
?
?
?
?
?
?
?
?
?
?

How many seconds in a week?

