

Algebra/Logic Items A

TREND

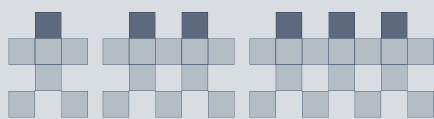
Approach: Independent

Level: Year 4 and year 8

Focus: Varied algebra items.

Resources: None.

Questions/instructions



1. How many tiles will you need to make the pattern for ...

10 people? [YEAR 8]

52

5 people? [YEAR 4]

27

% responses
2001 ('97) 2001 ('97)
year 4 year 8

• 31 (•)
17 (•) •

2. Which statement is true?

A $442 > 436$

A 56 (41) 70 (71)

B $352 > 759$

C $518 > 819$

D $883 < 794$

3. What rule is used to get the numbers in Column B from the numbers in Column A?

Column A	Column B
12	3
16	4
24	6
40	10

A Divide the number in Column A by 4.

A 27 (•) 61 (60)

B Multiply the number in Column A by 4.

C Subtract 9 from the number in Column A.

D Add 9 to the number in Column A.

4. $3 \times (\square + 5) = 30$

The number in this box should be

A 2

B 5

B • 69 (74)

C 10

D 22

% responses
2001 ('97) 2001 ('97)
year 4 year 8

5. If $\frac{2}{25} = \frac{n}{500}$, then $n =$

A 20

B 30

C 40

D 50

C • 34 (35)

6. What is the least whole number x for which $2x > 11$?

A 5

B 6

C 22

D 23

B • 30 (29)

7. $x < 6$

x is a whole number.

Write down the solution set of this sentence.

0,1,2,3,4,5

• 3 (3)

1,2,3,4,5

• 5 (5)

Commentary

Only one trend item was available for year 4 students, with 15 percent more students succeeding in 2001 than in 1997. Very little change was evident overall on the six trend items for year 8 students.