

الرياضيات

الأسئلة المعلنه للعام الدراسي 2010

7

1

What are the next two numbers in the number pattern below?

2 6 3 9 4 12

5, 12

5, 15

15, 4

12, 9

Key: 2

Strand: Number and algebra

Standard: 08.1 Extend and find missing terms in numeric or geometric patterns or sequences u...

DOK: 02 Application

2

After a heavy rain storm, the level of a river rose 40%.

If the usual depth of the river is 8 meters, what is the depth after the storm?

- 3.2 m
- 5.8 m
- 10.8 m
- 11.2 m

Key: 4

Strand: Number and algebra

Standard: 05.5 Calculate the outcome of a percentage increase or decrease, and find a percen...

DOK: 02 Application

3

Ibrahim thinks of an integer number from 1 to 15. Yusef guesses Ibrahim's number.

Assuming the number is chosen at random, what is the probability that Yusef will guess Ibrahim's number?

$\frac{1}{225}$

$\frac{1}{100}$

$\frac{1}{15}$

$\frac{3}{5}$

Key: 3

Strand: Data handling

Standard: 11.7 Solve simple problems based on equally likely outcomes for a single event.

DOK: 01 Understanding

Solve for x .

$$3x + 8 = 2(x + 1)$$

$$x = \underline{\hspace{2cm}}$$

Show how you would prove your answer.

Show your work here.

Answer:
-6

Work Shown:
 $3x + 8 = 2(x + 1)$
 $3(-6) + 8 = 2((-6) + 1)$
 $-18 + 8 = 2(-5)$
 $-10 = -10$

Since this is true, $-10 = -10$, I have proved that x is -6 .

correct answer AND correct work shown	2 pts
correct answer only OR correct work shown may be incomplete	1 pt
Response is incomplete or irrelevant	0 pts
No response	Blank

Points: 2

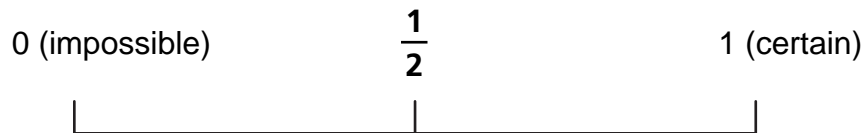
Strand: Number and algebra

Standard: 07.4 Solve linear equations or inequalities with integer coefficients (unknown on ...

DOK: 02 Application

Nadia has a bag of blocks. The bag contains 5 black blocks, 7 white blocks, and 4 blue blocks.

Put an X on the probability scale below to show the probability that Nadia picks a blue block out of the bag.



What is the probability expressed as a fraction?

Answer: _____

Answer:	
$\frac{1}{4}$	
<p style="text-align: center;">0 (impossible) $\frac{1}{2}$ 1 (certain)</p>	
Correct graph AND correct answer	2 pts
Correct graph OR correct answer	1 pt
Response is incomplete or irrelevant	0 pts
No response	Blank

Points: 2

Strand: Data handling

Standard: 11.5 Use the probability scale, and represent probability as a fraction, proportio...

DOK: 02 Application

Adel exercises 45 minutes a day. He has exercised for a total of 1,395 minutes.

On how many days did Adel exercise?

Answer: _____

Write a number sentence that you could use to check the accuracy of your answer.

Answer: _____

A. Answer: 31 days	
B. Answer: $31 \times 45 = 1395$ OR $1395 \div 45 = 31$ days OR Other valid response	
Two correct answers	2 pts
One correct answer OR minor error in calculation	1 pt
Response is incomplete or irrelevant	0 pts
No response	Blank

Points: 2

Strand: Number and algebra

Standard: 02.10 Check answers for accuracy by using inverse operations.

DOK: 02 Application