

**HAST SAMPLE Questions for Year 7**

1. In a certain college in Sydney, 40% of the senior class students are taking Physics, 30% are taking calculus and 10% are taking both. If 40 students are enrolled in the senior class, how many students are taking neither Physics nor calculus?

- a. 12 students.
- b. 18 students.
- c. 10 students.
- d. 16 students.
- e. 14 students.

2. Answer the following question after studying the graph.

By what percentage did the profit decrease from March 2011 to March 2012??



- a) 44.53%.
- b) 50%.
- c) 52.87%.
- d) 60%.
- e) 62.32%.

3. Adrian bought 12 pens for \$3.6 and 10 pencils for \$2.2. He found that 5 out of 12 pens and 3 out of 10 pencils were defective. He went to exchange the defective pens and pencils. He was given another set of 8 pens and 5 pencils for the same price as that of the previous set in exchange for those defective pens and pencils. He returned the cost of the extra pens and pencils in cash. How much did he return to the shopkeeper in total?

- a. \$1.25
- b. \$1.34
- c. \$1.44
- d. \$1.50
- e. \$1.65

The bar graph below shows a country's foreign exchange reserves (in million US \$) from 1991 - 1992 to 1998 - 1999.

Foreign Exchange Reserves of a Country. (in million US \$)



The foreign exchange reserves in 1996-97 were approximately what per cent of the average foreign exchange reserves over the period under review?

- a) 95%
- b) 110%
- c) 115%
- d) 125%

Contact Us - 0488859008

4. The following table shows the times when different flowers remain open during 24 hours:

Flower	Open Time	Close Time
Rose	09:00 AM	07:00 PM
Jasmine	06:00 PM	06:00 AM
Tulip	07:00 AM	03:00 PM
Lavender	08:00 AM	08:00 PM
Hibiscus	10:00 AM	05:00 PM

Which flower stays open the shortest during 24 hours?

- a) Rose
- b) Tulip
- c) Hibiscus
- d) Lavender

5. Emma has the following clothes in her wardrobe:

3 pairs of shoes

5 tops

2 pairs of pants



Contact Us - 0488859008



An outfit consists of one pair of shoes, one top, and one pair of pants.

How many different outfits can Emma wear?

- a) 20
- b) 25
- c) 30
- d) 35

6. Emma, the florist, creates floral arrangements using 9 different types of flowers. The table below shows each flower's colour and available months.

Flower Colour	Flower Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Red	R1	Red	Red	Red					Red	Red	Red	Red	
	R2			Red	Red			Red	Red	Red	Red		
Orange	O1	Orange	Orange	Orange	Orange						Orange	Orange	Orange

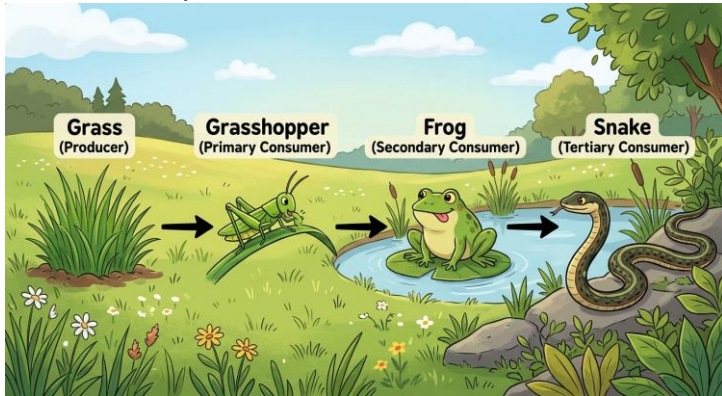
Yellow	Y1											
	Y2											
Blue	B1											
	B2											
Pink	P1											
	P2											

What is the maximum number of colours Emma can use in a single bouquet, based on the table?

- a) Two
- b) Three
- c) Four
- d) Five
- e) Six

Contact Us - 0488859008

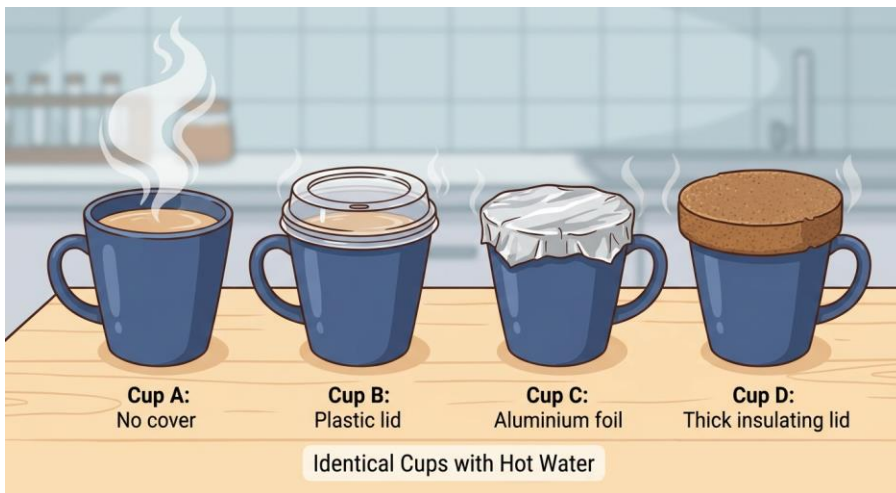
A simple food chain is shown:



If the number of frogs decreases significantly, what is the most likely effect?

- A. Grasshopper population decreases
- B. Snake population increases
- C. Grasshopper population increases
- D. Grass increases rapidly

Four identical cups contain hot water. Each cup is covered differently:



Which cup will retain heat the longest?

- A. Cup A
- B. Cup B
- C. Cup C
- D. Cup D

