Selective Example Questions + Solutions

Premium
Mathematics

Sam renovated his rectangular garage. He changed the length to half and increased the garage breadth to triple. What is the percentage change in area?

○ 50%

○ 25%

○ 75%

○ 15%

Feedback:
Let the original length of garage = x and original breadth of garage = y; original area = xy;
New length = x/2 and new breadth = 3y;

$$New\ Area = \frac{x}{2} \times 3y = \frac{3xy}{2}$$

$$Change\ in\ area = \frac{3xy}{2} - xy = \frac{xy}{2}$$

% increase in area = change in area ÷ original area x100

$$\frac{\frac{xy}{2}}{xy} \times 100 = 50\%$$

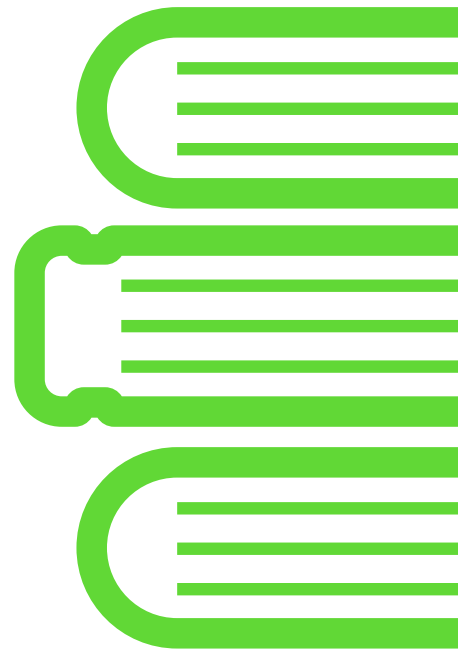## Selective Example Questions + Solutions

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Reading Comprehension - Part 1 (Passage)

Adventures of Isabel
By Ogden Nash

Isabel met an enormous bear,
Isabel, Isabel, didn't care;
The bear was hungry, the bear was ravenous,
The bear's big mouth was cruel and cavernous.
The bear said, Isabel, glad to meet you,
How do, Isabel, now I'll eat you!
Isabel, Isabel, didn't worry.
Isabel didn't scream or scurry.
She washed her hands and she straightened her hair up,
Then Isabel quietly ate the bear up.
Once in a night as black as pitch
Isabel met a wicked old witch.
the witch's face was cross and wrinkled,
The witch's gums with teeth were sprinkled.
Ho, ho, Isabel! the old witch crowed,
I'll turn you into an ugly toad!
Isabel, Isabel, didn't worry,
Isabel didn't scream or scurry,
She showed no rage and she showed no rancour,
But she turned the witch into milk and drank her.
Isabel met a hideous giant,
Isabel continued self-reliant.
The giant was hairy, the giant was horrid,
He had one eye in the middle of his forehead.
Good morning, Isabel, the giant said,
I'll grind your bones to make my bread.
Isabel, Isabel, didn't worry,
Isabel didn't scream or scurry.
She nibbled the zwieback that she always fed off,
And when it was gone, she cut the giant's head off.
Isabel met a troublesome doctor,
He punched and he poked till he really shocked her.
The doctor's talk was of coughs and chills
And the doctor's satchel bulged with pills.
The doctor said unto Isabel,
Swallow this, it will make you well.
Isabel, Isabel, didn't worry,
Isabel didn't scream or scurry.

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Reading Comprehension - Part 2 (Questions & Solutions)

Q. The line 'Then Isabel quietly ate the bear up' is an example of ....?

- ◉ hyperbole
- ○ allusion
- ○ allegory
- ○ metaphor

Feedback: **Hyperbole** is an exaggerated statement that is used to make a point. It helps to add different attributes to the comic character or humour to the fiction work. As in the above poem the line " *Then Isabel quietly ate the bear up' is an example of ...*" is an example of hyperbole.

Allusion an indirect remark or reference to a real or imaginary person or an event. For example, Charles Dickens' A Christmas Carol: "*When she lost her job, she acted like Scoorge, and refused to buy anything that was not necessary.*"
Allegory is a story (for example fables) or a poem that project a hidden meaning or moral.
Metaphor describes an action that isn't literally true but explains through comparison.

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Q. The witch turned into milk owing to which process?

- ◉ Liquefaction
- ○ Gasification
- ○ Solidification
- ○ Ossification

Feedback:
Liquefaction is a process that either generates a liquid from a solid or gas. In the poem the witch turned into milk is a liquefaction process.
Gasification is a process that converts fossil fuels (petrol, or diesel) into carbon monoxide, hydrogen and carbon dioxide.
Ossification is a natural process of bone formation.

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General Ability

Q. Three of the following words have similar meanings. Which word has a different meaning?

Sturdy, Fragile, Tenuous, Decrepit

- ⦿ Sturdy
- ◯ Fragile
- ◯ Tenuous
- ◯ Decrepit

Feedback:
Sturdy-means strong, muscular, robust or brawny;
Fragile-means brittle, flimsy, or delicate;
Tenuous-means weak, tenancy, shaky or fragile;
Decrepit-means feeble, old, weak.

Q. The number of these groups follows the same rule. Find the 31st term in the sequence

3, 9, 15, 21, 27...

- ⦿ 183
- ◯ 93
- ◯ 103
- ◯ 111

Feedback:
Note:
When there is a common difference in the series, and it asks for some forward number then to use Arithmetic Progression (AP) method.

Number asked = First number + (number of terms -1) x Common difference;
First number 3;
Common difference 6;
Total terms 31;

31st terms = 3 + (31-1) x 6 = 3 +180 =183

OC Example Questions + Solutions

Premium

5 Questions + Solutions

Jellyfish is to ephyna as Oyster is to

- ⦿ spat
- ◯ fry
- ◯ squab
- ◯ fawn

Feedback: An ephyna is baby jellyfish.

A spat is an oyster that has not reached its prime maturity or we can say the young stage of oyster.

Choose the odd one out

- ⦿ Dingo
- ◯ Bilby
- ◯ Kangaroo
- ◯ Koala

Feedback: Marsupials mammals-Koala, Kangaroo Bilby, Wallaby, Wombat; Dingo is placental mammals

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Linda bought lunch for $49.50 and gave 10% tax on it. How much did she pay?

- ⦿ $54.45
- ◯ $53.45
- ◯ $59.50
- ◯ $44.55

Feedback: Lunch cost 49.50; Tax 10% of cost = 49.50 * (10/100)=$4.95; total paid = 49.50+4.95 = $54.45

OC Example Questions + Solutions

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5 Questions + Solutions

If Jemmy had picked up thrice as many oranges as he actually did, he would had picked 4 baskets (each basket contains 50 oranges) of oranges more than he had now. How many oranges did Jemmy pick up with the new speed as compare to original speed?

- ◉ 300
- ○ 200
- ○ 100
- ○ 6 baskets

Feedback:
Let Jemmy picked 100 oranges = 2 baskets (each basket of 50 oranges);

New speed = thrice of original speed
= 3 x 100
= 300
= 6 baskets
=2 basket + 4 basket;

Given with new speed he picks four more baskets then original speed.

Find the value of

3+5+7+9+11+13+15+17+19

- ◉ 99
- ○ 77
- ○ 88
- ○ 101

Feedback: 3+5+7+9+11+13+15+17+19;
First number =3 and last number =19;
sum =19+3=22;

There are 4 such combinations and one number at centre 11
= 22 x 4 + 11 = 99

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