

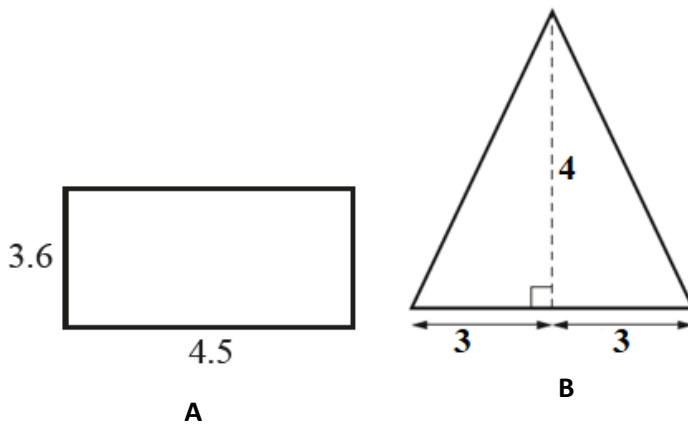
UNIT-1 EQUABLE SHAPES

An equable shape is a shape that has the same numerical perimeter and area.

NOTE: (i) The figures are NOT TO SCALE. (ii) Lengths in figures are given in centimeters.

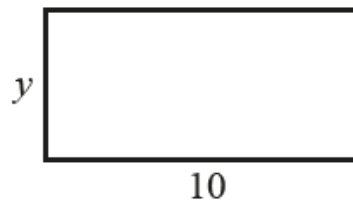
Question 1) Which one of the following is an equable shape? Choose the correct option .

- a) Figure A
- b) Figure B
- c) Both Figure A and B
- d) Neither Figure A and B



Question2:

If the given rectangle is an equable shape, then the value of y is ?



- a) 1.1 centimeters
- b) 10 centimeters
- c) 2.5 centimeters
- d) 4.5 centimeters

UNIT 2: PARCEL BY COURIER

In Zedland, couriating a parcel costs (i) 3.25 zeds per kg and (ii) a fixed pick-up service charge of 5 zeds. Shyleja sends some books weighing 'w' kg.



Question 3) Which of the following equation below show the correct relationship between courier charge, 'C' and the weight, 'w'?

- a) $C + 5 = 3.25 \times w$
- b) $C = 5 + 3.25 \times w$
- c) $C \times 5 = 3.25 \times w$
- d) $C = 3.25 \times 5 \times w$

Question 4) If Shyleja paid 57 zeds, the weight of her parcel was ?

- a) 10.75 kg
- b) 15 kg
- c) 16 kg
- d) 12.5 kg

Question 5) Iqbal, Cherian and Rahul are close friends. On Rahul's birthday, Iqbal sent him a photo frame, and Cherian sent him a chess set. The weight of the photo frame was 4 kg more than that of the chess set. How much more did Iqbal pay for couriating his parcel than Cherian?

- a) 10 zeds
- b) 11 zeds
- c) 12 zeds
- d) 13 zeds

UNIT 3: ENTERTAINMENT FAIR

Malavika visits an entertainment fair in Zedland where various gaming companies have set up their stalls with lots of games. Guidelines at the entertainment fair are as follows:



- I. There is only one cash counter, which is located near the entrance to the fair.
- II. No cash transaction is allowed at any stall. Players can pay for the games using Gold cards (worth 20 zeds) or Silver cards (worth 10 zeds).
- III. Players can purchase the cards (as many as they want) only from the cash counter.
- IV. A player can use either a Silver card or a Gold card to play any game once.
- V. If a player wins a game played using a Silver card, the Silver card will be replaced with a Gold card.
- VI. If a player wins a game played using a Gold card, the Gold card will be returned to the player and a new Silver card will be given as a reward. Both the Gold and Silver cards can be used for further games.
- VII. However, if the player loses a game, the card used for the game will be forfeited.
- VIII. Players can obtain cash refund for their cards at the cash counter. The refund value of a Silver card is 8 zeds and that of a Gold card is 18 zeds.

Malavika paid 30 zeds and bought one Gold card and one Silver card. She used both the cards in the first stall and won both the games. She did not want to repeat playing in the same stall. She took all the cards she got from the first stall and used them in the second stall. She won all the games in the second stall too. She again took all the cards she got from there and used all of them in the third stall. She continued this in the subsequent stalls.

Question 6) If Malavika won every game she played, the number of cards of each type she will have with her when she comes out from the third stall are

- a) 5 Gold and 3 Silver cards
- b) 3 Gold and 3 Silver cards
- c) 5 Gold and 2 Silver cards
- d) 3 Gold and 5 Silver cards

Question 7) The amount of money she will get if she redeems all the cards she has after visiting the fourth stall is (she wins all the games in the fourth stall as well)

- a) 166 zeds
- b) 176 zeds
- c) 184 zeds
- d) 192 zeds

UNIT 4: GARMENT STORE

Leela went to a small garment store with her son. She wanted to buy an outfit for him. In the garment store, she found two types of shirts: Formal and Denim. There were 3 choices for formals and 4 choices for denims. There were two types of pants: Jeans and Formal, with 2 choices for each of them.



Question 8) If any shirt can be worn with any pair of pants, the number of ways Leela can select an outfit for her son are

- a) 20
- b) 24
- c) 26
- d) 28

Question 9) Leela decides to select either a formal shirt with a pair of formal pants (not with jeans) or a denim shirt with a pair of jeans (not with formal pants). The total number of ways she can select the outfit now are :

- a) 12
- b) 14
- c) 16
- d) 20