

P6 Percentage 3 (Discount and GST)

In this worksheet, you will be practising on questions relating discount and GST.

My Learning Notes on Percentage 3 (Discount & GST)!

1) Reminder:

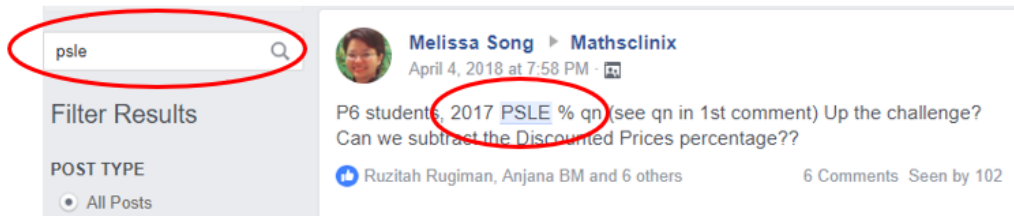
When the 100% bases are different, i.e. different values, the % CANNOT be added or subtracted!

— 'If ... If...' qn —

— P.S.: Log into Facebook mathsclinix group and attempt 2017 PSLE Paper 2, Q14 NOW! 😊 —

— Search under "PSLE" —

— https://www.facebook.com/groups/376388049387334/badge_member_list/?badge_type= —



Name: _____

Class: _____

Date	Homework

Let's Recap



What is a **discount**?

A discount is a **reduction** of a price.

Terms to note:

Percentage

Usual Price/Original Price	= Price <u>before</u> discount	100%
Discount	= Amount to deduct from usual price	Discount %
Discounted Price	= Price <u>after</u> discount	100% - Discount %

What is **G.S.T.**?

G.S.T. is known as Goods and Services Tax. It is a tax that levied on the supply of goods and services in Singapore and the import of goods into Singapore.

The current prevailing rate is 7% (with effect in 2007). By 2025, G.S.T will increase from 7% to 9%.

G.S.T. is charged based on the amount of money you **pay** for the items/services. If a **discount is given**, GST is charged based on the **Discounted Price**.



MISCONCEPTUAL OF 7% GST COMPUTATION

Usual Price → 100%

Discount given → 10%

Discounted Price → 90%

Amount payable (with 7% GST) = 90% + 7% 90%!

= 97% of Usual Price (WRONG!)

100% for the G.S.T. is not the usual price but is the Discounted price! Hence, it cannot be added to 90%!



What is the correct computation for the G.S.T.?

Answer: GST → 7% of 90% of Usual Price = 6.3% of Usual Price

Amount payable → 90% + 6.3%

= 96.3% of Usual Price



For **service charge** (usually 10%, which is applicable more in restaurants), do we **add** or **subtract** from the price payable? Add


Is the service charge subjected to G.S.T.? Yes!

Let's Practise on word problems involving discount and GST.

1. After a discount of 25%, the price of a concert tickets is \$60. Senior citizens are given a further discount of \$12. What is the total percentage discount given to senior citizens for the ticket? [Source: PSLE 2014 qn, Paper 1, Q13]

Answer: _____

2.



CHARITY SHOW
Tickets at \$15 each
\$8 discount for every 4 tickets

Sharon paid \$342 for tickets to the Charity Show. How many tickets did she get?

Answer: _____

3.

ELECTRONIC SALE FAIR!

1st electronic product at 10% discount

2nd electronic product at 20% discount

*Price of 2nd electronic product should be equal to or lower than the price of the 1st electronic product.

Miss Lim and Miss Neo each bought two electronic products at the sale.

- (a) Miss Lim bought a vacuum cleaner and washing machine priced at \$300 and \$1000. How much did she pay for them?
- (b) Miss Neo paid a total of \$1200 for a TV and refrigerator. She paid \$400 more for the TV than the refrigerator. What was the price of the refrigerator before discount?

Answer: (a) _____

(b) _____

4. Maria bought a watch at a discount of 15% from a shop. Janet bought a similar watch a month later from the same shop. She was given a 32% discount on the watch. Janet paid \$8.50 less than Maria. What was the usual price of the watch?

Answer: _____

5. During a sale, shop X and shop Y were selling similar blouses at \$49 and \$42 each respectively. Before the sale, the price of blouses was the same in both shops. A sum of \$98 could be saved by buying 2 blouses from each shop during the sale.
- (a) How much was the discount in shop X during the sale?
- (b) Find the percentage discount of the blouse given by shop Y?

Answer: (a) _____

(b) _____

6. The usual price of a washing machine was \$680 before the 7% GST. Mrs Keng bought the washing machine at a discount of 15%. How much did Mrs Keng pay for the washing machine, inclusive of the 7% GST?

Answer: _____

7. Jason bought a dining set during a Great Singapore sale. He was given a discount of 20%. If Jason paid \$1 027.20 for the dining set inclusive of 7% GST, what was the original price of the dining set?

Answer: _____

8. During its anniversary, shop Y gave a 20% discount to all customers. Members of shop Y enjoyed an additional 10% discount on the discounted price. Mrs Tan, a member of shop Y bought a dress and paid \$64.80. What was the original price of the dress?

Answer: _____

9. *During an annual sale, a shop offered its mobile phones at a 10% discount. The first 10 customers enjoyed a further \$39 discount. Mr Pillay, who was the 7th customer, paid \$353.10, inclusive of 7% GST, for a mobile phone. What was the original price of the mobile phone bought by Mr Pillay before the discount and GST?

Answer: _____

10. Mrs Chandra bought a refrigerator and a TV set at a discount of 20%. She paid a total of \$4000. If the price of the refrigerator is 60% that of the TV set, what was the price of the refrigerator before the discount?

Answer: _____

11. The usual price of an air cooler is 25% of a washing machine. During the Great Singapore Sale, Courts superstore offered a storewide discount of 30%. Mrs Lim bought an air cooler and a washing machine at a total discounted price of \$2590. How much did she save on the air cooler?

Answer: _____

12. At a shop, the price of a microwave oven is 25% that of a TV set. Mrs Lim bought one microwave oven and one TV set at a discount of 30% each. She paid a total of \$2239.51 for them, inclusive of 7% GST.

(a) How much money did Mrs Lim save on the two items because of the discount?

(b) What was the price of the TV set before the discount and GST?

Answer: (a) _____

(b) _____

13. *At a shop, the price of a skirt was 20% greater than that of a blouse. Minah bought a skirt at a discount of 25% and a blouse at a discount of 30%. She paid \$48 for the two items. How much did she save on the two items?

Answer: _____

14. *At a departmental store, the price of a luggage bag was 15% greater than that of a briefcase. Johnson bought a luggage bag at a discount of 10% and a briefcase at a discount of 20%. He paid \$146.80 for the two items.

- (a) How much was the cost of the luggage bag before the discount?
- (b) How much did he save on the two items?

Answer: (a) _____

(b) _____

15. **Kelly spent a total of \$384.30 on a dress and a handbag during a sale. She spent \$166.70 more on the handbag than on the dress.
- (a) How much did she spend on the handbag?
 - (b) The total discount given for the two items was \$33.70. She was given a 5% discount for the handbag. What was the percentage discount given for the dress?

Answer: (a) _____

(b) _____

16. **Mrs Tan bought 3 pens and 2 calculators from a book store during a sale. She spent a total of \$68.40 altogether. She spent \$32.40 more on the pens than the calculators. The total discount for all the items was \$15.60 and she was given a 25% discount for the calculators.

(a) What was her savings on the 3 pens?

(b) What was the percentage discount given for the pens?

Answer: (a) _____

(b) _____

Discount on "If... If..." questions

17. Kelly saved a certain amount of money to buy a laptop. If she buys the laptop at a discount of 5%, she needs \$56 more. If she buys it at a discount of 15%, she will have \$92 left over.

- (a) What is the usual price of the laptop?
- (b) How much was Kelly's saving?

Answer: (a) _____

(b) _____

18. Mrs. Lee wants to buy a dining table. If she buys at a discount of 8%, she needs \$220 more. If she buys at a discount of 20%, she needs \$82 more. What is the usual price of the dining table?

Answer: _____



19. **Mr Lee bought some T-shirts for \$425. If he was given a discount of 15%, he would be able to buy 5 more identical T-shirts for the same amount of money. What was the original price of each T-shirt?

Answer: _____

20. ***A bag was sold at \$650 in shop A. This price was 30% more than the price of the same bag sold in shop B. During the sale, both shops reduced the price of the bag. The percentage discount given to the price of the bag was the same in both shops. Mrs Ang bought the bag in shop B and paid \$105 less than the discounted price in shop A. What was the percentage discount?

Answer: _____

Additional Questions (For Advanced Learners)

1. Mr Tay pumped \$70 worth of petrol into his car. The petrol station was offering a discount of 8% on the petrol. In addition, Mr Tay got a further discount of 5% during the payment. The discounted price was subjected to 7% GST. How much did Mr Tay pay in the end? Leave your answer correct to 2 decimal places.

Answer: _____

2. Before the Mid-year Sale, Store A and Store B were selling a similar dress at the same price. During the sale, such a dress was sold at the discounted price of \$144 in Store A and \$135 in Store B. Mrs Tan bought 1 dress from Store A and 2 dresses from Store B and saved a total of \$126. Find the percentage discount given by Store A.

Answer: _____

3. **Xiao Li wanted to buy a dress. She saw a pink dress on sale at 10% discount and a yellow dress at 20% discount. Both dresses had the same discounted price.

To buy both dresses, Xiao Li needs \$16 more than what she had. She bought the yellow dress and had \$92 left.

(a) What was the discount given for the yellow dress?

(b) How much money did Xiao Li have at first?

Answer: (a) _____

(b) _____

4. **At Shop A, Mr Tang bought a laptop for \$2400 which was 20% more than the price that Shop B sold it for.
- (a) How much did Shop B sell the laptop at?
 - (b) During a sale, both shops offered an equal percentage discount on the same laptop. Mr Tang bought a second laptop at Shop B and paid \$320 less than the discounted price in Shop A. What was the percentage discount?

Answer: (a) _____

(b) _____

5. ****On Saturday, blouses in a shop were sold at \$18 each. On Sunday, the price of blouses was reduced. It was found that the number of blouses sold on Sunday increased by 50% while the amount of money collected increased by 25%. Find the price of a blouse sold on Sunday.

Answer: _____