

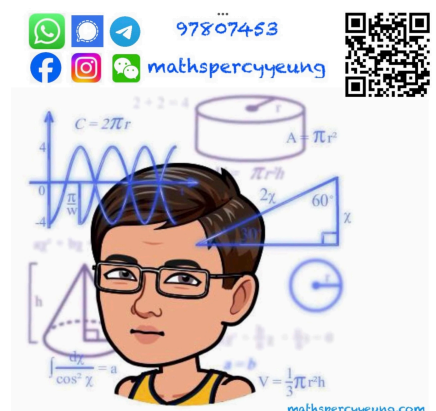
TT F3 Ch4 Percentages (II) Quiz

Name: _____ ()

Class: _____

Ch4 Quiz 1

- In a chemical reaction, the amount of substance A in a solution decreases at a constant rate of 15% per hour. If there is 50 mg of substance A in the solution now, find
 - the amount of substance A in the solution 8 hours later,
 - the decrease in the amount of substance A from now to 8 hours later.(Give your answers correct to 1 decimal place.)
- Originally, it takes 600 days to build a bridge. Due to the lack of labour, the number of days required to build the bridge has increased by 35%. Because of the bad weather conditions, the number of days to build the bridge is further increased by 10%. Can the bridge be built within 900 days? Explain your answer.
- A puppy was bought in August. Its weight was decreased by 10% in September and was further decreased by 5% to 5.13 kg in October. Find
 - the weight of the puppy in August,
 - the overall percentage decrease in the puppy's weight from August to October.



4. The base of a parallelogram is increased by 5%, while its height is decreased by 4%. Find the percentage change in the area of the parallelogram.
5. The profit of a company increases by 18% each year. The profit of the company is \$380 000 this year. Find the profit of the company two years ago.
- A. \$256 000, *cor. to 3 sig. fig.*
 - B. \$273 000, *cor. to 3 sig. fig.*
 - C. \$529 000, *cor. to 3 sig. fig.*
 - D. \$565 000, *cor. to 3 sig. fig.*
6. According to past record, the rainfall of an island decreased by 4% each year from 2011 to 2014. The rainfall was 3200 mm in 2014. If the percentage decrease in the rainfall remains unchanged, find the decrease in the rainfall of the island from 2011 to 2015.
- A. 241 mm, *cor. to 3 sig. fig.*
 - B. 545 mm, *cor. to 3 sig. fig.*
 - C. 3330 mm, *cor. to 3 sig. fig.*
 - D. 3620 mm, *cor. to 3 sig. fig.*
7. The ratio of the original length to the original width of a rectangle is 3 : 1. If the length and width of a rectangle increases by 30% and 40% respectively, its perimeter will increase by
- A. 2.6%.
 - B. 26%.
 - C. 32.5%.
 - D. +35%.